

FM 1-15

Copy 2

5/5 30 Sept 1977

FM 1-15

Ch 1,

FIELD MANUAL

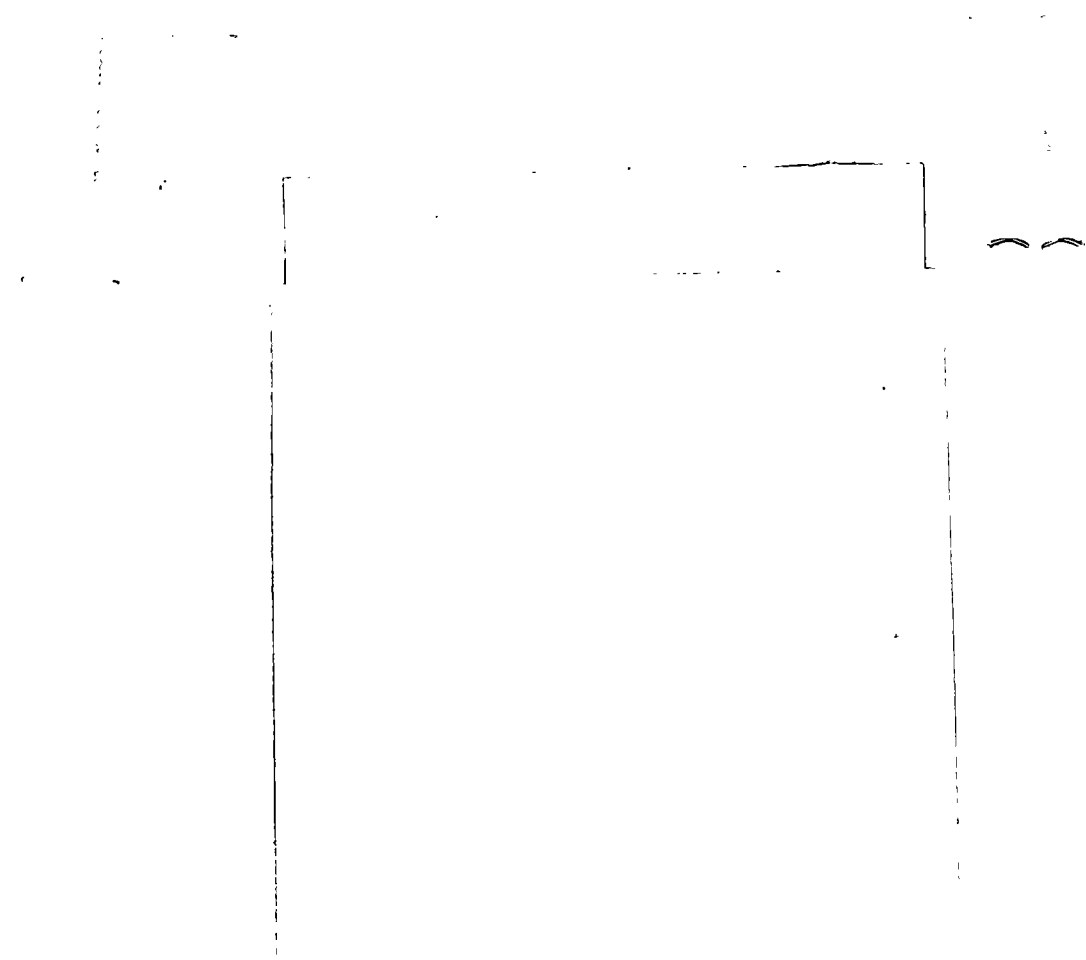
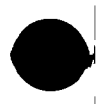
★ AVIATION COMPANY, BATTALION, GROUP, AND BRIGADE

RETURN TO ARMY LIBRARY
ROOM 1 A 518 PENTAGON

HEADQUARTERS, DEPARTMENT OF THE ARMY
DECEMBER 1970⁶⁹

TAGO 20019A

.....



ay 2
CHANGE }
No. 1 }

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 11 December 1970

AVIATION COMPANY, BATTALION, GROUP, AND BRIGADE

FM 1-15, 18 December 1969, is changed as follows:

1. New or changed material is indicated by a star.
2. Remove old pages and insert new pages as indicated below.

Old pages—	New pages—
Front cover ✓	Front cover ✓
i and ii ✓	i ✓
1-1 ✓	1-1 ✓
.....	16-1 through 18-16 ✓
A-1 and A-2 ✓	A-1 ✓

3. File this change sheet in front of the manual for reference purposes.

By Order of the Secretary of the Army:

Official:

KENNETH G. WICKHAM,
Major General, United States Army,
The Adjutant General.

W. C. WESTMORELAND,
General, United States Army,
Chief of Staff.

Distribution:

To be distributed in accordance with DA Form 12-11 requirements for Army Aviation Organization and Employment and Aviation Battalion.

RETURN TO ARMY LIBRARY
ROOM 1 A 518 PENTAGON

FIELD MANUAL }
No. 1-15

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 18 December 1969

★AVIATION COMPANY, BATTALION, GROUP, AND BRIGADE

	Paragraph	Page
PART ONE. INTRODUCTION		
CHAPTER 1. PURPOSE AND SCOPE	1-1-1-3	1-1
2. GENERAL	2-1-2-12	2-1
PART TWO. COMBAT AVIATION BATTALION, AIRBORNE AND INFANTRY DIVISIONS		
CHAPTER 3. GENERAL	3-1-3-5	3-1
4. HHC, COMBAT AVIATION BATTALION		
Section I. Mission and Composition	4-1-4-3	4-1
II. Command and Staff	4-4-4-22	4-2
CHAPTER 5. ASSAULT HELICOPTER COMPANY	5-1-5-4	5-1
6. AVIATION GENERAL SUPPORT COMPANY	6-1-6-4	6-1
PART THREE. COMBAT AVIATION GROUP, AIRMOBILE DIVISION		
CHAPTER 7. INTRODUCTION	7-1-7-15	7-1
8. HHC, COMBAT AVIATION GROUP	8-1-8-10	8-1
9. AVIATION GENERAL SUPPORT COMPANY	9-1-9-10	9-1
10. ASSAULT HELICOPTER BATTALION	10-1-10-8	10-1
11. ASSAULT SUPPORT HELICOPTER BATTALION	11-1-11-7	11-1
PART FOUR. COMBAT AVIATION BATTALION, GROUP, AND BRIGADE (NONDIVISIONAL)		
CHAPTER 12. GENERAL		
Section I. Introduction	12-1-12-3	12-1
II. The Battalion	12-4-12-8	12-2
III. The Group	12-9-12-12	12-2
IV. The Brigade	12-13-12-16	12-3
CHAPTER 13. HHC, COMBAT AVIATION BATTALION (NONDIVISIONAL)	13-1-13-5	13-1
14. HHC, COMBAT AVIATION GROUP (NONDIVISIONAL)	14-1-14-5	14-1
15. HHC, AVIATION BRIGADE (NONDIVISIONAL) ..	15-1-15-6	15-2
★PART FIVE. AVIATION COMPANY		
★CHAPTER 16. INTRODUCTION		
Section I. General	16-1-16-6	16-1
II. Combat Service Support	16-7-16-10	16-3
III. Signal Communications	16-11-16-16	16-5
★CHAPTER 17. COMPANY ELEMENTS	17-1-17-6	17-1
★18. COMPANY ORGANIZATIONS	18-1-18-20	18-1
APPENDIX A. REFERENCES	—	A-1
B. SUGGESTED OUTLINE FOR AN SOP	—	B-1
C. AIR STANDARDIZATION AGREEMENT (AIR STD 44-25A)	—	C-1
D. BATTALION OPERATIONS CENTER	—	D-1
INDEX	—	Index-1

★*This manual supersedes FM 1-15, 21 April 1967; FM 1-20 (TEST), 5 April 1968; FM 1-5, 26 May 1966, including all changes.



.

.



.

.



1

PART ONE

INTRODUCTION

CHAPTER 1

PURPOSE AND SCOPE

1-1. Purpose

This manual provides doctrine and guidance for commanders, staff officers, and other personnel concerned with the operation of the Army aviation company, battalion, group, and brigade. It is intended for use as a reference, and as a text for the presentation of instruction on the organization and functions of these Army aviation units.

1-2. Scope

a. Doctrine is provided on the operation of Army aviation units that provide Army aviation combat support to land forces. The combat service support functions of Army aviation units are discussed in FM 55-46.

b. Applicable TOE are referenced throughout the manual to assist users requiring more detailed information on the organization and equipment of specific units.

★c. The manual discusses the relationship of Army aviation to the airspace control element (ACE) and air traffic control (ATC) elements of the aviation company, battalion, group, and brigade.

★d. Subject to modification to meet environmental considerations, the operations described in this manual are capable of worldwide application.

★e. The manual is generally applicable to Army aviation units participating in stability operations, conventional warfare, or nuclear warfare.

★f. This manual is in consonance with the following international standardization agreements:

(1) STANAG 3468, General Rules Covering the Transport of Loads by Helicopter.

(2) STANAG 3531, Investigation of Aircraft/Missile Accidents/Incidents.

(3) STANAG 3597, Helicopter Landing Sites — Criteria and Marking.

1-3. Recommendations To Improve Clarity or Accuracy

Users of this manual are encouraged to submit recommended changes and comments to improve the manual. Comments should be keyed to the specific page, paragraph, and line of the text in which the change is recommended. Reasons will be provided for each comment to insure understanding and complete evaluation. Comments should be prepared using DA Form 2028 (Recommended Changes to Publications) and forwarded direct to the Commanding Officer, United States Army Combat Developments Command Aviation Agency, Fort Rucker, Alabama 36360. Originators of proposed changes which would constitute a significant modification of approved Army doctrine may send an information copy, through command channels, to the Commanding General, United States Army Combat Developments Command, Fort Belvoir, Virginia 22060, to facilitate review and followup.

CHAPTER 2

GENERAL (STANAG 3531)

2-1. Introduction

This chapter contains doctrine which applies generally to all aviation units discussed in the manual, subject to adaptation to the level and capabilities of each unit.

2-2. Command Relationships

a. The commander of a supporting Army aviation (AAVN) unit becomes a subordinate commander and an advisor to the supported US Army land force commander. Although the aviator in command of an aircraft is the authority on the technical operation of that aircraft, the Army commander to whose command the AAVN is assigned or attached exercises the same command function over the aviator, organization, and equipment as he does over his other Army units (AR 95-1).

b. The command relationship established between the ground unit and the supporting aviation unit depends upon the mission or degree of control directed by the higher headquarters. Degree of control depends on the capability of the ground unit to plan, coordinate, control, and logistically support the AAVN unit. Normally, an aviation battalion or an element thereof is controlled by its parent unit and is placed in support of the ground unit, with operational control of both units retained by the headquarters which directs and supports the operation.

2-3. Basic Employment Factors

Factors upon which employment of AAVN is based include the—

- a.* Mission of the ground combat force.
- b.* Plan of maneuver of the ground combat force.
- c.* Impracticability of using surface means of mobility.
- d.* Capabilities of available aviation units.

e. Availability of necessary airfields and bivouac areas.

f. Availability and suitability of aviation support from other sources, to include the US Air Force and Navy.

g. Availability and expected expenditure of aviation POL and armament.

h. Enemy intelligence, particularly the air defense and air offense capability.

i. Operational agreements relating to allied forces and host country forces in an internal defense/development environment.

j. Weather and terrain.

2-4. Capabilities and Limitations

a. Capabilities. Throughout the manual, the capabilities of specific Army aviation units are given. These capabilities are based on operations under conditions permitting optimum use of personnel and aircraft. The capability of an aviation unit can be accurately estimated only by application of the unit's basic capabilities to the conditions expected to exist during an operation. Variable factors that must be considered include density altitude, wind velocity, terrain, aircraft condition, and aviator proficiency. The aviation unit commander is the individual responsible for applying such variable factors to his unit's capability and advising the ground commander as to the airlift or other capability of the aviation unit.

b. Limitations. Limitations stated in this manual for specific units normally are the result of TOE structuring and do not include characteristics generally common to all units containing aircraft, such as the following:

- (1) Vulnerability to enemy air defense measures and enemy aircraft.
- (2) High consumption rates for POL and ammunition.
- (3) Relatively high maintenance require-

ments when compared to other means of transport.

(4) Effects of adverse weather conditions.

(5) Reduced ability to defend aircraft and base position while participating in operations.

(6) Those limitations which are common to night and reduced visibility conditions.

(7) Limited capability to lift heavy equipment.

2-5. Airmobile Operations

The capabilities of aviation units to participate in airmobile operations are discussed throughout the manual. FM 57-35 contains full details on the conduct of airmobile operations.

2-6. Command Post

a. General. The command post (CP) is the headquarters from which the aviation unit commander and his staff exercise administrative and tactical functions. Personnel of the CP normally include the commander or the executive officer, S1-2-3-4 or their representatives, special staff officers, and sufficient clerical, communications, and other personnel to assist in maintaining a 24-hour capability for the CP.

b. Location. The CP is located in the position best suited to mission accomplishment and from which control over organic and attached elements can best be exercised, normally on or near the division airfield. The S3, in coordination with the S2 and the communications-electronics staff officer, recommends the general location of the CP. The specific location, to include the internal arrangement of command post elements, is determined by the S1 assisted by the headquarters company commander and the communications-electronics staff officer. The commander or his representative makes the final selection. The location should permit maximum dispersion of personnel and equipment consistent with efficient operations. The CP should not be near prominent terrain features such as crossroads or bridges which could provide references for enemy observation and fire.

c. Security. Aviation units are basically responsible for the security of their own CP. Where security is a problem beyond the capability of the unit, appropriate security elements are requested from higher headquarters.

2-7. Special Missions

In addition to aviation support normally provided by AAVN units, the requirement often exists for

the employment of aviation units in a special role. These special missions usually require that one or more aircraft be used to conduct missions which may or may not be directly related to the surrounding tactical situation. When such a requirement exists, the aviation unit commander is thoroughly briefed on the details of the undertaking and makes recommendations on mission execution based on aircraft and aircrew availability, and immediate future requirements for aviation support. Special missions of this type may include participation in feints; raids; search and rescue; exfiltration/infiltration; nuclear, biological, and chemical operations; illumination; support of psychological operations; support of internal defense operations; support of forces committed to rear area protection missions; support of military police operations (FM 19-1) such as convoy escort and security, and route reconnaissance security; and support of special forces operations.

2-8. Night Operations

Properly planned and executed night operations give friendly forces a tactical and psychological advantage over the enemy. Where the enemy relies on the cover of darkness to provide him the freedom of action necessary to conduct and support combat operations, night operations give friendly forces an opportunity to disrupt, disorganize, and demoralize the enemy's night effort. The increased reliance placed upon electronic and visual aids during night operations by both friendly and enemy forces requires that electronic counter-countermeasures be taken whenever possible. Since night operations require more detailed planning than day operations, early liaison and planning should be initiated to develop a mutual understanding of requirements (FM 31-36).

2-9. Aviation Safety

The aviation safety officer administers the aviation safety program in accordance with Army Regulations of the 95-series and other appropriate publications such as AR 385-40. In this effort, the aviation safety officer advises the commander on aviation safety matters and assists in maintaining an optimum relationship between accident-free aircraft operations and uncompromised mission accomplishment. The aviation safety program includes—

a. Aviation safety training.

b. Aircraft accident prevention survey.

- c. Aircraft accident prevention plan.
- d. Pre-accident plan.

2-10. Training

The broad training principles and policies to be used by all commanders are set forth in AR 350-1. Training in aviation units consists of that training required for effective mission performance. Integrated training, in which an aviation unit participates in training exercises with the same ground units that are to be supported in a planned operation, is of particular value to both the aviation unit and the ground unit. The aviation unit operations and training officer (S3) prepares the unit training program and is responsible to the commander for its implementation.

2-11. Armed Helicopters

Armed helicopters discussed in this manual, to include attack helicopters, are used primarily to provide aerial escort to helicopter element transporting troops and materiel in the combat zone. Details on the tactical employment of attack helicopters are contained in FM 1-40, FM 1-110, and FM 6-102.

2-12. Aircraft Rearming and Refueling

a. *General.* The Army aviation unit commander is responsible for accomplishing the rearming and refueling of aircraft assigned to his unit.

b. *Base Location.* Unit aircraft operating from the unit's base location will be rearmed and refueled by aviation unit personnel using organic equipment.

c. Forward Areas.

(1) *Delivery.* Where it is necessary to establish forward area aircraft rearming/refueling points, the aviation unit commander will normally be responsible for delivery of ammunition and fuel to those points. However, if circumstances such as time, distance, or duration make this task infeasible, the headquarters common to both the supporting aviation unit and the supported ground unit will arrange for delivery. In this event, the aviation commander will recommend the time and place of delivery and state the quantities and type of ammunition and fuel required.

(2) *Rearming and refueling.* Unit aircraft operating in forward areas will normally be rearmed and refueled by aviation unit personnel using organic equipment. When this is infeasible, the headquarters common to both the supporting aviation unit and the supported ground unit may task the combat service support unit in direct support of the ground unit to augment the aviation unit capability to establish and operate rearming/refueling points. However, in this event, an aircraft crew member, or qualified personnel provided by the aviation unit will supervise the actual introduction of ammunition and fuel into the aircraft.



4

2



1

1



PART TWO

COMBAT AVIATION BATTALION, AIRBORNE AND INFANTRY DIVISIONS

CHAPTER 3

GENERAL (STANAG 3531)

3-1. Authorization

Aviation elements which are organic to a division are referred to as divisional aviation elements. These elements are authorized on the basis of each type division's requirements for constantly available AAVN support. Each airborne division is authorized a combat aviation battalion under TOE 1-55, and each infantry division is authorized a combat aviation battalion under TOE 1-75. These organic battalions are employed to support division operations on an immediately responsive basis. Where specific missions require aviation support beyond that organic to a division, additional AAVN support may be requested from corps or field army resources. Communications diagrams for the divisional combat aviation battalion are contained in FM 61-24.

3-2. Mission

The mission of the divisional combat aviation battalion is to provide aviation support for the division headquarters, division support command, and other divisional units that have no organic aircraft. In addition, the battalion provides—

- a. General support and reinforcement to units possessing organic aircraft.
- b. An aviation special staff section for the division.

3-3. Composition

Figure 3-1 shows the composition of the combat aviation battalion of the airborne and infantry divisions. Figures 4-1, 5-1, and 6-1 show the organization of the major components of the battalion.

3-4. Capabilities

At strength level 1, the battalion has the capability to—

- a. Provide command and control, perform staff planning, and furnish communications and supervision of operations for companies of the battalion and attached units.
- b. Provide an aerial command post, air messenger service, aerial radio retransmission, and field wire-laying service by use of aircraft as required by division headquarters.
- c. Subject to the provisions of paragraph 2-4a, airlift the assault elements of one rifle company in one airlift using organic aircraft.
- d. Operate one instrumented airfield with terminal flight facilities to include ground controlled approach (GCA).
- e. Provide ATC services to aircraft operating in the division area (para 4-22f).

3-5. Employment

a. *General.* The combat aviation battalion is designed to provide aviation support to the airborne and infantry division in the combat zone. It has the ability to overcome a variety of obstacles to the movement of ground combat elements and it contributes to the mobility and maneuverability of those forces in offensive actions. In defense, retrograde, or denial operations, the battalion can help impede the progress of enemy ground forces by providing timely intelligence, by delivering troops and materiel to sustain positions held by friendly elements, and by transporting forces to block critical avenues of approach. Efficient employment of the battalion is accomplished when its capabilities

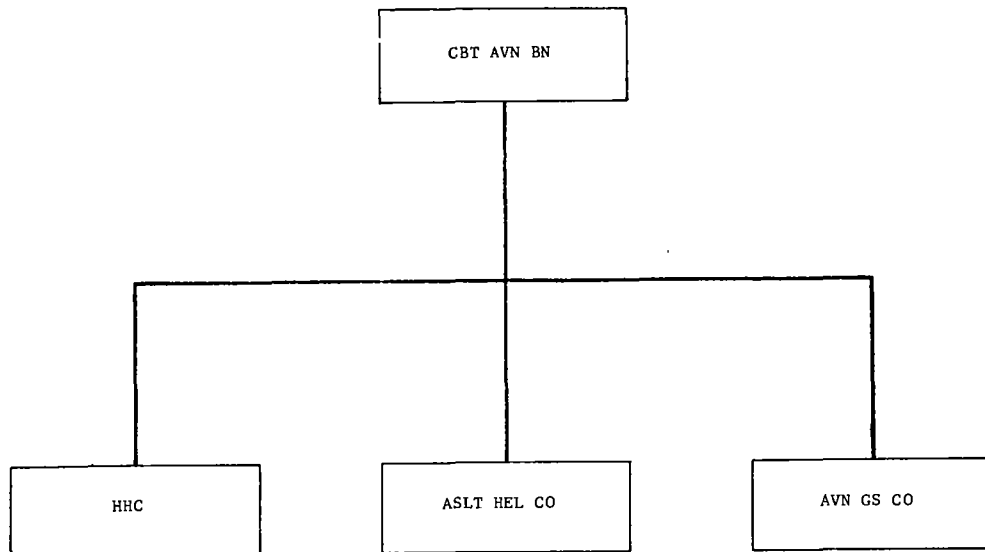


Figure 3-1. Combat aviation battalion (TOE 1-55 and 1-75).

are used with those of the ground combat unit to provide a balance among the land combat functions.

b. Operational Status. The battalion normally is not employed as a unit. Elements of the battalion are attached to, placed under the operational control of, or placed in support of other units of the division. The HHC is normally located with the aviation general support company at the division instrumented airfield. The assault helicopter company may be employed as a unit or fragmented into smaller elements to fit the situation. This

company operates from its own dispersal area and should be located so that it can obtain air traffic control and terminal air support from the main instrumented airfield. When the requirement for aviation support within the division exceeds the capability of the divisional aviation battalion, additional aviation support can be requested from nondivisional aviation resources of higher headquarters. Aviation units attached to the division may be further attached to the division aviation battalion when their mission necessitates close control by that echelon.

CHAPTER 4

HHC, COMBAT AVIATION BATTALION

Section I. MISSION AND COMPOSITION

4-1. Mission

The mission of the headquarters and headquarters company (HHC), combat aviation battalion, airborne and infantry divisions (TOE 1-56 and TOE 1-76), is to furnish command, control, administration, battalion-level organizational maintenance (except aircraft), communications, and supply for the battalion.

4-2. Composition

The composition of the HHC is shown in figure 4-1.

Note. The pathfinder section shown in figure 4-1 applies only to the airborne division.

4-3. Capabilities

The headquarters and headquarters company—

a. Commands, controls, performs staff planning, and furnishes communications and supervision of operations for companies of the battalion and attached units.

b. Provides aviation special staff personnel for the division headquarters.

c. Provides personnel to supervise battalion supply, organizational maintenance, and administration for organic and attached units.

d. Operates one instrumented airfield with ter-

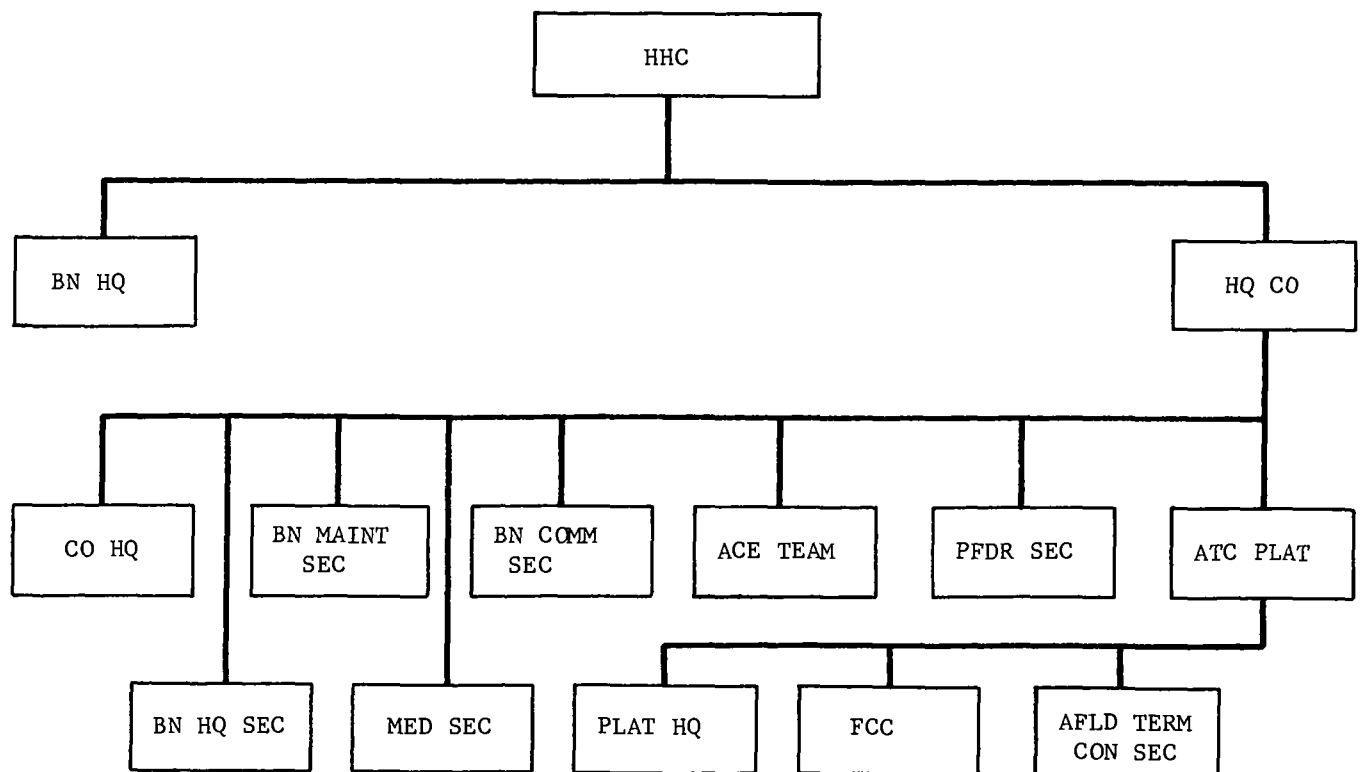


Figure 4-1. Headquarters and headquarters company (TOE 1-56 and TOE 1-76).

minal flight facilities to include ground controlled approach.

e. Provides air traffic control services to aircraft operating in the division area (para 4-22f).

f. Provides AAVN personnel for the airspace control element (ACE) located in the DTOC (para 4-22f).

g. Reconnoiters and marks drop or landing sites to insure accurate delivery of personnel and materiel by paratroop or air landed operations.

h. Assists in navigation and control of Army aircraft in the objective area.

Note. This capability is not organic to HHC, combat aviation battalion, infantry division, but will be furnished by TOE of the 7-500-series where required.)

Section II. COMMAND AND STAFF

4-4. General

The combat aviation battalion commander exercises his authority and promotes continuity throughout the battalion by prescribing policies, assigning missions, and designating tasks for units under his control. Effective operation of this chain requires that sufficient authority be delegated to enable subordinates to accomplish tasks for which they are responsible. The command and staff functions discussed in this chapter, and in FM 101-5, generally are applicable to other aviation units discussed in this manual.

4-5. Commander's Responsibilities as Division Aviation Officer

The commander of the divisional combat aviation battalion is assigned the additional duty of division aviation officer. In this capacity, he is responsible for informing and advising the division commander and staff on the technical aspects of aviation and the employment of elements of the battalion. In addition he—

a. Exercises staff supervision over technical and flight aspects of administration, training, safety, and operations of Army aviation units.

b. Monitors the maintenance of aircraft and advises the commander, responsible staff personnel, and major subordinate commanders on the condition of equipment.

c. Prepares the aviation portion of the training program and exercises special staff supervision over aviation training in the command.

d. Plans and supervises the following Army aviation operations:

(1) Employment of aviation in combat and combat support operations.

(2) Establishment and operation of the air traffic regulation system.

e. Assists the staff in preparing aviation portions of estimates, plans, orders, and reports.

f. Prepares the aviation portion of the air movement plan; in conjunction with the AD officer and other appropriate agencies, assists in developing the airspace utilization plan.

g. Coordinates with transportation and movements staff personnel in matters requiring Army aircraft for combat service support operations.

4-6. Assistant Division Aviation Officer

An assistant division aviation officer is authorized in each divisional combat aviation battalion. He is located at the division tactical operations center (DTOC) and, as the principal representative of the division aviation officer on the division special staff, performs duties similar to those noted in paragraph 4-5. He keeps abreast of the division's tactical disposition and future plans, and advises the division aviation officer on these matters. Although his specific duties vary, depending on the desires of the division aviation officer, he normally prepares pertinent annexes to division operations orders, administrative orders, estimates, plans, and reports.

4-7. Command and Staff Relationships

The staff is responsible to the commander for acquiring information; making recommendations; preparing estimates, detailed plans, and orders implementing command decisions; and coordinating plans and operations. The commander maintains a close relationship with his staff officers and keeps them fully informed. He establishes definite functional responsibilities for his staff, delegates authority commensurate with responsibilities, and charges the executive officer with responsibility for directing and coordinating the staff.

4-8. Battalion Staff

a. The battalion staff consists of the executive officer, unit staff officers, special staff officers, and the sergeant major.

b. Staff officers assist the battalion commander in the exercise of command. They transmit the commander's orders to subordinate units and relieve him of time-consuming details. Through coordination with the DTOC, the staff maintains information upon which to base recommendations for approval by the commander. This information includes the—

(1) Location, current and projected availability, and current and projected use of organic, assigned, attached and supporting units.

(2) Status of logistics and administration.

(3) Capabilities, strength, location, and composition of enemy forces.

c. The successful functioning of the battalion staff depends upon close coordination among its members and among other staff members and units of the command. This includes coordination with staff members of higher headquarters and supporting units. Staff officers must know the duties and responsibilities of other members of the staff to promote fuller coordination and to be able to assume such duties in case of emergency. The staff should be organized to operate on a 24-hour basis.

4-9. Battalion Staff Relationships

a. The battalion staff officers are the executive officer, S1, S2, S3, and S4. Battalion staff officers insure that the special staff is informed on plans, policies, and decisions of the commander. They obtain information, estimates, and recommendations from the special staff and subordinate commanders and use this data in preparing reports, estimates, recommendations, and plans for the commander. All staff officers keep each other informed on matters of mutual interest.

b. Special staff officers are supervised by a unit staff officer when performing special staff activities. The special staff officer may deal directly with the commander or executive officer; however, he is obligated to keep the unit staff officer informed of those dealings.

c. Subordinate commanders are afforded direct contact with the commander. When time permits, the commander may call upon leaders of organic and attached units for estimates and recommendations pertaining to their units. The commander uses this information together with data from his staff as the basis for estimates and decisions.

4-10. Executive Officer

The executive officer is the principal assistant and advisor to the battalion commander. Although his specific duties vary depending on the desires of the commander, he normally performs duties similar to those of the chief of staff at the general staff level. The executive officer is charged with the responsibility for execution of staff tasks, the efficient and prompt response of the staff, and the coordinated effort of staff members. He transmits the commander's decisions to the staff sections and to subordinate units, when applicable, in the name of the commander. He keeps abreast of the situation and future plans, and acts for the commander in his absence. He is prepared to assume command of the battalion at any time. Normally, the executive officer is located at the CP and, assisted by the headquarters company commander, is responsible for its operation. When the CP displaces, the executive officer usually closes the old CP and moves with the last echelon to the new location. The executive officer is prepared to assume command whenever it becomes necessary.

4-11. Adjutant

The adjutant (S1) has unit staff responsibility for personnel activities and other administrative matters not assigned to other staff officers. He may, when the need arises, advise the commander in those areas of interest which would normally concern, at higher staff levels, the inspector general, staff judge advocate, provost marshal, special service officer, and finance officer. He has staff supervision of the activities of the surgeon and responsibility for movement, initial arrangement, organization, and operation of the headquarters and the allocation of shelter within the headquarters. His principal assistant for this function is the headquarters company commander.

4-12. Intelligence Officer

The intelligence officer (S2) has staff responsibility for matters pertaining to combat intelligence and counterintelligence. He keeps the commander, staff, subordinate units, and all other interested agencies fully informed on enemy capabilities and activities, terrain and weather, and on other intelligence matters pertinent to accomplishment of the mission. He plans, prepares for, and assists in supervising the execution of intelligence training. He is a nuclear weapons employment officer.

4-13. Operations and Training Officer

The operations and training officer (S3) has staff responsibility for all matters pertaining to training and combat operations. He works closely with the assistant division aviation officer and the ACE. He exercises staff supervision over attached aviation units, CBR and signal activities and, in the absence of an S5, civil-military operations including civil affairs and psychological operations. He has staff responsibility for the overall security of the aviation battalion, including the rear area when applicable. The S2 and S3 work as a team, with each being qualified and prepared to perform the duties of the other. The S3 is a nuclear weapons employment officer.

4-14. Logistics Officer

The logistics officer (S4) has staff responsibility for planning, coordinating, and supervising the operation of the logistical facilities of the battalion. He insures that organic and nonorganic administrative service support elements adequately support the plans of the battalion.

4-15. Sergeant Major

The sergeant major is the senior noncommissioned officer assigned. He serves as the principal enlisted assistant and advisor to the battalion commander. He takes necessary action to insure that high standards of conduct and appearance are observed by enlisted personnel within the unit and its attachments, placing emphasis on these qualities for noncommissioned officers.

4-16. Special Staff

a. General. Special staff officers normally have knowledge and/or training in special areas included in, but more specialized than, the broad fields of interest of the battalion staff officers, and largely relating to technical, administrative, and branch matters. Special staff officer activities may be directly supervised by the battalion executive officer or by the staff officer having primary interest in the field of the special staff officer's activities. This decision is left to the commander whose primary concern is to gain a working relationship among the staff that insures continuity of effort without unnecessary links in the chain of communications.

b. Surgeon. The surgeon is a medical officer qualified as an aviation medical officer or flight surgeon; he is assigned to the battalion headquar-

ters under staff supervision of the S1. He has direct access to the commander; however, he works closely with members of the battalion staff in matters directly affecting the health of the command, medical care of troops, and the proper employment of medical personnel, equipment, and supplies. In an internal defense situation, the surgeon can initiate a military civic action program by providing medical services, dispensary facilities, advice to local doctors, and possibly an airmobile visiting dispensary. Within the battalion, the surgeon exercises operational control over the medical section and, as the division aviation medical officer, performs those duties for all organic division and attached aviation units. He serves as a member of aircraft accident investigation and flight evaluation boards. He also formulates, supervises, and coordinates all medical aspects of the aviation safety program with appropriate commanders and staff officers.

c. Communications and Electronics Officer. The communications and electronics (COMMEL) staff officer advises the commander and staff on field COMMEL matters to include command post selection and COMMEL capabilities, limitations, security, and operating procedures. He plans and organizes COMMEL systems and supervises the technical and tactical operation and maintenance of avionics systems and communication facilities, such as wire, radio, visual, photographic, messenger, and commercial facilities. See FM 61-24 for communications diagrams for infantry and mechanized divisions.

d. Maintenance Officer. The maintenance officer supervises the maintenance section and, as a special staff officer, advises the battalion commander on capabilities of operating units' organizational maintenance sections to meet current and projected workloads. He advises the staff and subordinate commanders within the command on the technical aspects of aircraft, vehicle, and equipment operations and maintenance. He maintains liaison with the supporting maintenance and supply units and with the operating units of the aviation battalion to insure an effective direct support maintenance schedule.

e. Aviation Safety Officer. The aviation safety officer advises the battalion commander, staff, and subordinate units on safety aspects related to their individual functions with particular emphasis on aviation safety. He receives and disseminates safety directives or programs from higher headquarters, and implements and supervises the

battalion safety program in accordance with Army directives. He may be designated as division aviation safety officer, under the staff supervision of the division aviation officer, for all organic division and attached aviation units. (The G1 has staff responsibility for all division safety.)

f. CBR Officer. The battalion commander will appoint an officer to act as the CBR officer for the battalion. This officer will be school trained as prescribed in appropriate training directives (AR 220-58). The CBR officer, assisted by the chemical NCO, is the advisor to the battalion on CBR operations. The CBR officer, to include the NCO as appropriate—

(1) Assists the battalion S2 in the collection, processing, and dissemination of CBR intelligence information to include radiological survey party duties (FM 3-12); use of effective wind messages, fallout prediction messages, and nuclear, biological, and chemical reports as appropriate; enemy CBR materiel; aerial personnel detector operation, and CBR contamination data.

(2) Assists the battalion S3 on chemical, biological, and nuclear defense plans and operations to include preparation of the CBR and nuclear defense annexes to the battalion SOP, the training of unit CBR teams, determination of radiological time of entry and time of stay calculations, computation of the battalion radiation dose, preparation of the CBR portion of the master training schedule, the inspection of all CBR training, and the selection of individuals for CBR school training. He also assists in planning operations for aerial employment of tactical CS, flame, smoke, and defoliants.

g. Liaison Officer. The liaison officer, appointed by the battalion commander as an extra duty, is the commander's personal representative to the unit with which liaison is established. He must be thoroughly familiar with the situation and plans of his own unit and with the policies of his commander, and make such information available to the commander and staff of the visited unit. He familiarizes himself with the situation and plans of the unit to which he is sent and secures and transmits desired information to his own unit.

4-17. Command Group

a. A command group is a subdivision of the forward echelon containing certain key staff officers and personnel who usually accompany the commander. This group enables the commander to operate away from his CP in order to maintain a personal knowledge of the situation, exercise per-

sonal leadership, and closely control the operation. The command group has no fixed organization, but consists of the commander and selected personnel and equipment for a given situation. It may include the S3, COMMEL staff officer, maintenance officer, liaison officer, and communications personnel and necessary ground vehicles, aircraft, and command radio facilities. Sufficient command radio facilities are required to enable the command group to contact the CP, supported units, and subordinate units of the battalion as necessary.

b. There is no prescribed requirement for using the command group. This depends upon the commander's personality and the operational requirement. The means of transportation varies with the situation. If aircraft are available (particularly during large-scale airmobile operations), the commander may operate from an aerial CP. He may divide the command and control facilities between operation on the ground and in the air.

4-18. Command Post Operations

a. The direction and control of battalion operations is exercised primarily through the battalion command post (CP). The CP maintains communications with higher, adjacent, supporting, supported, and lower units (including indigenous forces as appropriate). Personnel normally at the CP include the battalion commander, battalion staff, necessary special staff officers, liaison personnel, and supporting personnel. Operation and displacement of the CP are prescribed in the unit SOP.

b. Activity in the CP centers on the S2/S3 staff. The executive officer normally supervises CP operations and insures that sufficient qualified personnel are on duty at all times (app D).

c. Although the CP is the central control point for the battalion, not all plans and decisions are made there. The commander assures that sufficient communications means are available to permit operation on the move. The command group maintains communications control while the main part of the CP moves.

d. The battalion commander orders the CP displaced whenever necessary to insure security or continuous responsive aviation support to the user.

4-19. Alternate Command Post

Prepared plans and trained personnel must provide the basis for continued command and control

in the event the battalion CP is rendered inoperative. Normally, the CP of one of the subordinate companies will be used as an alternate battalion CP, or the facilities of the command group may be used. Such plans are included in the SOP (app B).

4-20. Command and Staff Operations

It may be necessary to expedite staff actions, particularly in the airmobile operations. The commander and his staff officers continually keep abreast of the situation and constantly make or revise estimates. Orders are largely oral and fragmentary. Warning orders are issued to subordinate commanders as early as possible to permit initial preparation. Subordinate commanders are not necessarily called to the CP to receive orders. They may be issued orders at any place, as by radio, by the commander or designated staff officer in the name of the commander. Command and staff sequence will vary according to the time available, the situation, and the desires of the commander.

4-21. Command and Staff Action Sequence

a. Upon receipt of a mission from higher headquarters (or the senior advisor to indigenous forces), the commander analyzes the mission to determine the specified and implied tasks which must be performed in order to accomplish the mission. The commander establishes liaison with the supported unit either immediately, using previously prepared plans, or after he has met with his staff and formulated tentative plans. Then, based on estimates and recommendations of the staff, his knowledge of the situation, guidance provided by the higher commander, and his professional judgment, he formulates and issues planning guidance. This *planning guidance* provides the necessary direction for concurrent planning by the staff and a framework for making studies and estimates. Planning guidance from the commander is essential to eliminate needless exploratory work by the staff.

b. Upon receipt of the commander's planning guidance, staff officers begin their individual staff estimates. Formulation of operation estimates requires certain detailed information from all staff officers. The S2 furnishes the S3 the results of his analysis of the weather, terrain, enemy situation, and enemy capabilities. The S1 and S4 furnish the S3 details pertaining to their respective fields.

c. As staff officers prepare their estimates, the commander supplements liaison by visiting with

and advising the supported unit on aviation matters. Based on information obtained from the supported commander, the aviation battalion commander may change or modify his initial planning guidance. Each of the staff officers must then revise his initial planning estimates accordingly.

d. The S3 presents possible courses of action to the other staff officers to assist in their planning. Each staff officer completes his estimate using these courses of action to determine what limitations exist and which course is favored from his respective viewpoint.

e. Each staff officer arrives at recommendations to be made to the commander. At a time specified by the commander, the S3 presents one or more courses of action and recommends priority. Each of the other staff officers comments in turn on significant aspects within his respective field and recommends the best course of action from his standpoint. The commander may request further information as required to complete his estimate.

f. The commander completes his estimate and announces his decision. This decision is based on the supported unit commander's decision, and on recommendations from the staff. The commander normally elaborates upon his decision by issuing his concept of the operation. The concept is presented to the staff at the time the decision is announced. This concept is the basis for the concept of operation, which is paragraph 3a of the operation order.

g. Based on the decision and the concept, the staff completes its planning. The S3 has primary staff responsibility for the preparation of the plan. Additional details for the operation are furnished to the S3 by other staff officers. The plan is then presented to the commander for his approval. Upon approval, the S3 prepares the plan (order) to implement the commander's decision.

h. After the order is issued, the commander, assisted by his staff, supervises its execution.

i. The executive officer coordinates the accomplishment of the above actions to insure that the proper coordination takes place between staff officers and the liaison officer.

4-22. Considerations

The aviation battalion commander and staff must consider the following in arriving at a course of action considered in the estimate:

a. *Mission.* The mission is always given first consideration in developing courses of action. The

assigned mission, as well as missions of supported units, dictates employment of the battalion which in turn must be translated into tasks for subordinate and supporting units. Planning is oriented toward accomplishment of the mission. The aviation battalion plan must be integrated into and based upon the fire support plan and scheme of maneuver of supported units. Also, future missions must be considered and priorities established for their implementation.

b. Enemy. The location, disposition, and capability of the enemy (especially his air defense) must be considered.

c. Weather. The effects of weather on visibility, soil, trafficability, and men and equipment are important considerations in developing the best course of action for any operation. Low ceilings and limited visibility reduce enemy air and ground action and may be advantageous during some combat operations. These weather conditions can hinder air operations by precluding the use of large formations of aircraft.

d. Terrain. Terrain must be considered for local security and for locating support facilities such as airfields, heliports, loading zones, landing areas, navigation aids, flight routes, routes for ground supply, and communications.

e. Availability of Personnel, Aircraft, and Equipment. This refers to all the personnel, aircraft, and equipment available to the battalion. The disposition of the battalion and supporting units must be considered, as well as time and space factors. Availability of maintenance support and navigational facilities is of primary importance. Class I, IIIA, and VA supplies require special considerations because of the large area of operations of an aviation battalion.

f. Airspace Utilization. Utilization of available

airspace over the theater of operations is based on established procedures, to include host country regulations if applicable. At times the battalion may find it necessary to recommend changes to air defense rules of engagement, reentry procedures, the concept of air support from other services, and the airspace utilization plan to accomplish a particular mission.

(1) Air traffic control services for the division area are provided by the ATC platoon of the HHC, combat aviation battalion, shown in figure 4-1. Duties of the platoon headquarters include establishing radar (GCA) and nondirectional beacon instrument approach procedures for use by division and other aircraft operating in division areas. The flight coordination center assists in regulating IFR aircraft traffic entering, leaving, or operating within division areas other than control zones, and provides some flight following services for aircraft operating under VFR in division areas. The airfield terminal control section provides ATC services to flights operating in control zones containing division instrumented airfields. Additional resources may be requested from higher headquarters when it is necessary to establish remote area terminals for aircraft operations in forward areas.

(2) Coordination of air defense activities affecting Army aviation operations is accomplished in the DTOC by the airspace control element (ACE). The ACE is staffed by personnel of the Army aviation ACE team shown in figure 4-1 and by a similar team composed of division air defense personnel.

g. Communications. One of the most essential elements to be considered in arriving at a course of action is communication for command control and logistical support. FM 1-100 contains a discussion of aviation unit communications means.



CHAPTER 5

ASSAULT HELICOPTER COMPANY (STANAG 3468)

5-1. Mission

The mission of the assault helicopter company, combat aviation battalion, airborne and infantry divisions (TOE 1-57 and TOE 1-77), is to provide tactical airlift for the movement of troops and materiel within the combat zone.

5-2. Composition

The composition of the assault helicopter company is shown in figure 5-1.

5-3. Capabilities

At strength level 1, the assault helicopter company has the following capabilities:

a. Provides near continuous (day and night) operations during visual weather conditions, and limited operations under instrument weather conditions, in support of the division.

b. Subject to the provisions of paragraph 2-4*a*, provides, in a single lift, airlift of the dismounted assault elements of one infantry company.

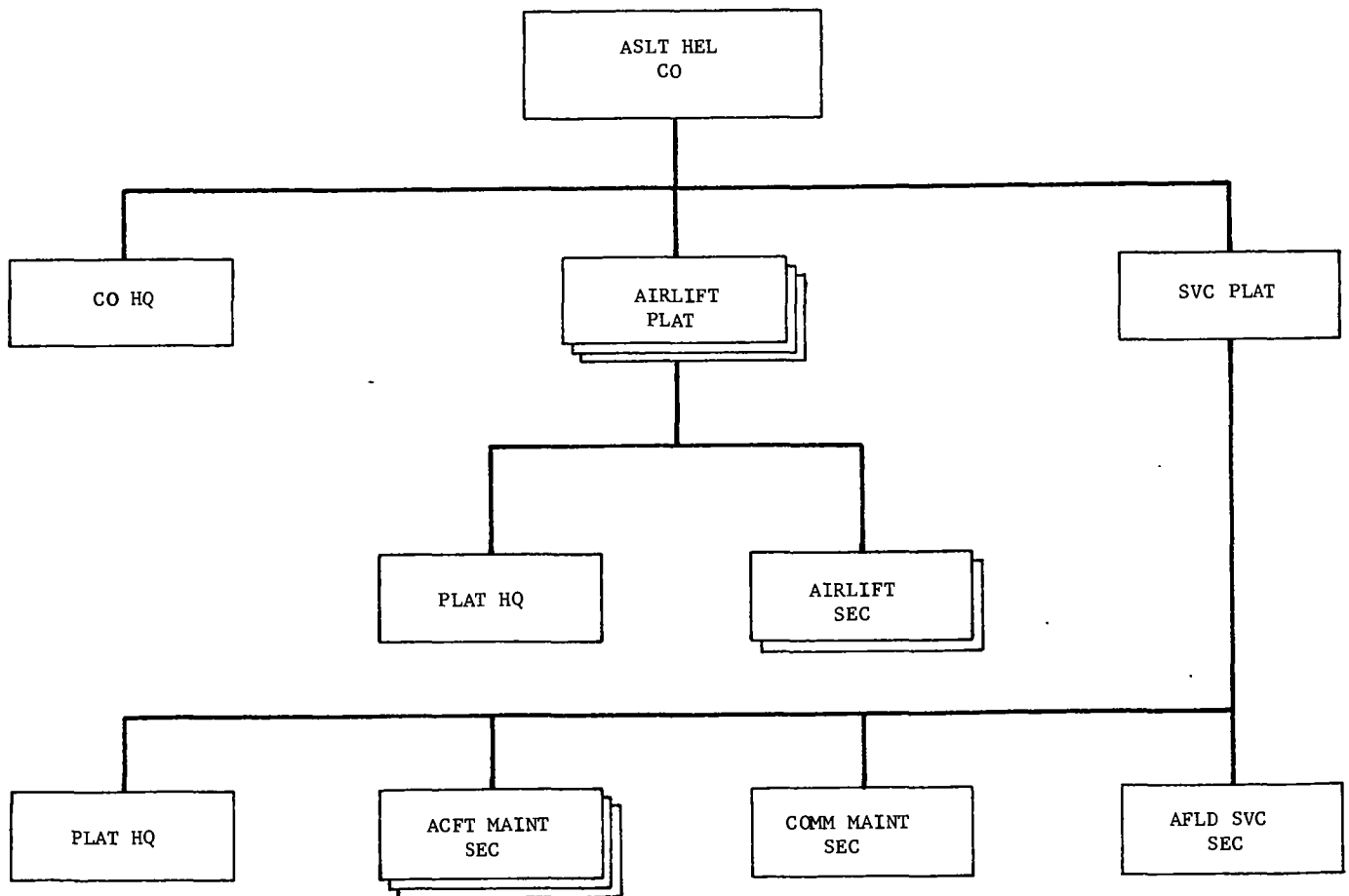


Figure 5-1. Assault helicopter company (TOE 1-57 and TOE 1-77).

c. Augments the aeromedical evacuation capability of medical air ambulance elements.

d. Provides company level organizational maintenance on organic equipment.

5-4. Employment

The assault helicopter company is organized and equipped to provide airlift for the movement of troops and materiel about the battlefield. The company is habitually employed in the combat zone to support division units conducting airmobile operations. The company is usually placed in direct support, or under operational control, of the unit which is to be supported. It normally operates

from its own dispersal or assembly area in division rear areas within the perimeter of one of the tactical units of the division reserve. The company has its own support and is capable of being employed for extended periods of time as a separate company. Although it is most effective when employed as a unit, the assault helicopter company may be fragmented when necessary with organic helicopters being employed on a mission basis. Platoons employed on independent missions for extended periods depend on the company or supported unit for support. (App C contains details on personnel procedures for helicopters in the transport role.)

CHAPTER 6

AVIATION GENERAL SUPPORT COMPANY

6-1. Mission

The mission of the aviation general support company, combat aviation battalion, airborne and infantry divisions (TOE 1-58 and TOE 1-78), is to provide aviation support for the division headquarters, division support command, and other units without organic aircraft, and to provide limited general support and reinforcement to units with organic aircraft.

6-2. Composition

The composition of the aviation general support company is shown in figure 6-1.

6-3. Capabilities

At strength level 1, the aviation general support company has the following capabilities:

a. Provides near continuous (day and night) operations during visual weather conditions and limited operations under instrument weather conditions.

b. Provides aerial observation, reconnaissance, and surveillance (day and night) of enemy areas

for the purpose of locating, verifying, and evaluating targets, terrain study, and fire adjustment.

c. Conducts aerial radiological survey; aerial personnel detector operations; aerial dissemination of CS, smoke, and flame; and small area defoliation operations.

d. Provides aircraft for command and control, liaison, reconnaissance, and communications.

e. Augments aeromedical evacuation capability of medical air ambulance elements.

6-4. Employment

The aviation general support company operates and maintains a heliport adjacent to the division main command post to support the division commander and his staff. This heliport has a day and night capability but normally is not instrumented. The aviation general support company contains the personnel and equipment necessary to provide near continuous and responsive aviation support to the division. Elements of the company are capable of providing limited direct aerial fire support to divisional units, and both aerial escort and

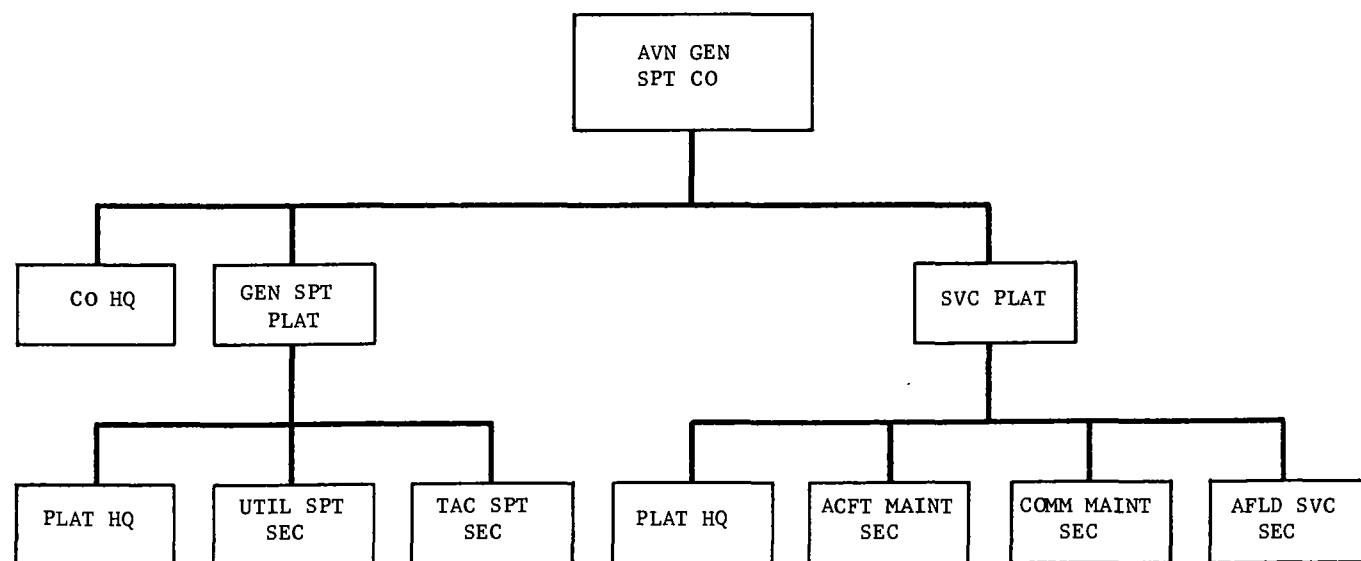


Figure 6-1. Aviation general support company (TOE 1-58 and TOE 1-78).

limited direct aerial fire support for airmobile operations. Organization of the sections within the company provides for flexible employment to meet

operational requirements. Helicopters assigned to the company normally are employed on a mission-type basis.

PART THREE

COMBAT AVIATION GROUP, AIRMOBILE DIVISION

CHAPTER 7

INTRODUCTION

7-1. General

The combat aviation group, airmobile division (TOE 1-100T), is a tactical support unit designed to provide combat and combat service support, airlift of personnel and materiel, aerial reconnaissance and surveillance, and general aviation support required by an airmobile division. The group is capable of accepting additional aviation attachments from corps or field army sources. Communications diagrams for the airmobile division are contained in FM 61-24.

7-2. Mission

The mission of the group is to provide aviation support for an airmobile division. The group also provides aviation special staff personnel for the airmobile division headquarters.

7-3. Composition

The composition of the group is shown in figure 7-1.

7-4. Capabilities

At strength level 1, the group has the following capabilities:

- a. Provides command and control, and performs staff planning and supervision of subordinate and attached units.
- b. Provides aviation special staff personnel for the division headquarters.
- c. Provides limited aerial battlefield surveillance to collect information from the enemy and terrain, and performs target acquisition.
- d. Subject to the provisions of paragraph 2-4a, airlifts simultaneously the assault elements of two

airmobile infantry battalions and three 105mm howitzer batteries.

- e. Near continuous (day and night) operations during visual weather conditions and limited operations under instrument flight conditions.

- f. Airlifts personnel and materiel of division units.

- g. Provides aircraft to support the division headquarters, the support command, and other units that do not have organic aircraft.

- h. Provides aircraft for general support and reinforcement to units that have organic aircraft.

- i. Augments aeromedical capability of the medical battalion by providing air transportation of patients at the request of the appropriate command surgeon.

- j. Provides pathfinder support for the division.

- k. Provides attack helicopters to perform aerial escort, limited direct aerial fire support, and armed reconnaissance missions for the division.

7-5. Major Elements

Major elements of the group are as follows:

- a. *Headquarters and Headquarters Company.* The HHC provides aviation special staff personnel for the airmobile division headquarters to include the airspace control element (ACE), command and staff support for the group, and pathfinder and terminal approach support for subordinate and attached units (chap 8).

- b. *Aviation General Support Company.* The aviation general support company provides command and control aircraft to support division headquarters and divisional units which do not possess organic aircraft. It also provides observa-

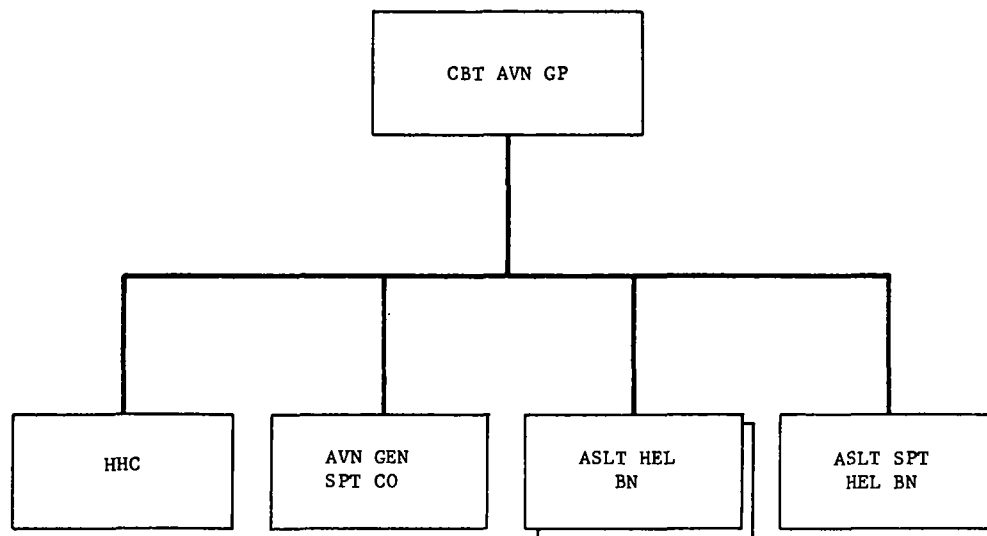


Figure 7-1. Combat aviation group (TOE 1-100T).

tion aircraft for conducting reconnaissance by use of visual and sensory means (chap 9).

c. Assault Helicopter Battalions. Airlift of brigade tactical elements is provided by the two assault helicopter battalions assigned to the group. Each battalion contains three assault helicopter companies and one attack helicopter company (chap 10).

d. Assault Support Helicopter Battalion. The assault support helicopter battalion contains three assault support helicopter companies that primarily provide airlift for the movement of artillery, engineers, infantry battalion logistical elements and some supplies, but which can be used to airlift infantry assault forces (chap 11).

7-6. Coordination

a. Combat Aviation Group Commander. The group commander also serves as the division aviation officer for the airmobile division. In addition to commanding activities of the group, and serving as aviation advisor to the division commander and staff, he exercises special staff supervision of nonorganic Army aviation elements attached to or supporting the division.

b. Assistant Division Aviation Officer. The assistant division aviation officer, located at the DTOC, serves as the primary coordination agency for the allocation of the division's aviation resources (para 4-6).

c. Group Headquarters. The group headquarters performs normal headquarters functions and pro-

vides detailed information for inclusion in the aviation annex of all division orders. It prepares the group aviation orders for employment of subordinate, organic, and attached units.

7-7. Group Commander

a. As one of the principal commanders in the airmobile division, the commander of the combat aviation group reports to and operates directly under the division commander. He exercises command over the group and all of its assigned or attached elements. In exercising this command, he is assisted by the group staff.

b. The group commander is assigned the additional duty of division aviation officer. In this capacity, he is responsible for informing and advising the division commander and staff on matters concerning employment of elements of the group, other divisional aviation units, and nondivisional AAVN elements supporting the division. He also—

(1) Maintains liaison with higher, lower, and adjacent unit headquarters.

(2) Prepares and supervises the aviation group portion of the division training program, and monitors aviation training for other units of the division.

(3) Supervises the establishment and operation of the division air traffic control system and division base airfields.

(4) Prepares aviation portions of division estimates, plans, orders, and reports.

7-8. Group Staff

The combat aviation group staff is responsible to the group commander for acquiring information; making recommendations; preparing estimates, plans, and orders; and coordinating group operations. FM 101-5 contains details of staff officer functions.

a. Unit Staff. The unit staff is composed of the executive officer, adjutant (S1), intelligence officer (S2), operations and training officer (S3), logistics officer (S4), and sergeant major. Staff functions normally are performed under supervision of the executive officer.

b. Special Staff. The special staff is composed of technical specialists and heads of service elements who advise and report directly to the group commander on group-wide activities. The surgeon,

aviation maintenance officer, aviation safety officer, chaplain, COMMEL staff officer, chemical officer, and the pathfinder platoon commander normally are designated as members of the special staff.

7-9. Liaison

To provide effective and timely aviation support to the division, the group must maintain liaison with the major units of the division. Figure 7-2 indicates the necessary liaison between the various elements of the division and the group.

a. A group liaison officer or team habitually is attached to each infantry brigade of the division. The liaison officer is the group commander's representative to the brigade commander and staff, and is immediately responsive to the group commander. When an assault helicopter battalion is

RECEIVING HEADQUARTERS	SENDING HEADQUARTERS			
	COMBAT AVN GROUP	ASLT HEL BN/CO	ASLT SPT HEL BN/CO	PFDR DET.
BRIGADE HQ	A	B	B	
INF/CAV BN/SQDN HQ		B		
INF/CAV CO/TRP HQ		B		
SUPPORT COMMAND (FSE)			B	
DIVISION ARTY			B	
ENGINEER		B	B	
ASLT HEL BN/CO				A
ASLT SPT HEL BN/CO				A

A--INDICATES HABITUAL LIAISON.

B--INDICATES LIAISON WHEN UNIT IS IN SUPPORT FOR OPERATIONS.

Figure 7-2. Combat aviation group liaison support requirements.

placed in support of an infantry brigade, the assault helicopter battalion commander becomes the brigade commander's principal advisor on the employment of the aviation battalion. When the majority of the group's assets are placed in support of a brigade, the group commander and his staff become the principal advisors and coordinators for employment of the group.

b. The group also maintains liaison with other major units of the division through unit liaison officers assigned from group. These liaison officers serve as advisors to the supported commanders on aviation matters and maintain direct communication between participating ground and AAVN elements.

7-10. Operations and Airspace Utilization

The combat aviation group is employed in general support of the airmobile division. Missions are received from division headquarters, and specific requirements are placed on the group's subordinate units by group headquarters. Aviation elements are usually placed in direct support of committed infantry brigades and division artillery. In addition, other elements of the group remain in general support, providing support on a mission basis under the operational control of group headquarters.

7-11. Group Headquarters

a. The group staff coordinates directly with the division staff in the development of plans for the tactical employment of aviation assets of the group. Based upon recommendations of the group commander (division aviation officer), units of the group are employed by the division to meet the tactical needs of the infantry brigade and supporting units. Group headquarters issues orders, assigns missions to, and coordinates with its subordinate elements concerning aviation support for other elements of the division.

b. Subordinate units of the group operate from dispersed locations within the division base when in general support, and from within the brigade base when employed in direct support of committed infantry brigades in forward areas. Regardless of location, all group units remain highly mobile in order to rapidly transfer support elements between brigades and other divisional units.

c. General aviation support procedures are basically the same in supported infantry and artillery

units whether they are in the offense, defense, or other type of operation. These procedures are implemented by communications links between supported unit and supporting aviation unit commanders, either through personal command contact or liaison teams. Exacting coordination is required to insure that the tactical mission is accomplished rapidly and efficiently.

d. Aviation units supporting an airmobile brigade task force obtain POL resupply from the combat service support elements located within the brigade base. This is a direct, coordinated relationship with the brigade forward support element and normally does not involve the brigade. Other aircraft of the group obtain POL resupply from the division base. Well forecasted and timely delivery of POL and other supplies to proper locations is essential to aircraft operations. The group headquarters monitors this logistical effort to insure adequate support.

7-12. Aviation General Support Company

The aviation general support company operates from an instrumented airfield within the division base. Normally, elements of the utility and support platoon supporting the division and group headquarters operate from the division main heliport and receive missions from the group headquarters operations section. The remaining elements of these platoons operate from the base airfield in general support of divisional units without organic aircraft, providing support on a mission-type basis. The surveillance platoon provides sustained, near all-weather, day or night surveillance from the instrumented airfield in general support of the division. Specific missions, day or night, normally are categorized as surveillance or reconnaissance. These missions are performed under operational control of the G2. Any given mission may employ visual observation and/or one or more of the sensors (IR, SLAR, and photo) organic to the OV-1 aircraft. During a specific mission, an aviator-observer team may change to another type mission or may perform both types concurrently when directed.

7-13. Assault Helicopter Battalion

The assault helicopter battalions normally operate in forward areas from dispersed locations within the brigade base of the supported unit. The battalion maintains a high degree of mobility. Effective support is facilitated by continuous coordination between infantry and aviation commanders, by frequent personal visits, and through liaison

officers. The tactical integrity of the assault helicopter battalion is maintained whenever possible; however, one assault helicopter battalion can be augmented by companies from other assault helicopter battalions for larger scale operations. Normally, this is for short periods of time and support is maintained from the parent unit. Operations are characterized by rapid movement and support of troops about the battlefield, achieving tactical gains from increased mobility.

7-14. Assault Support Helicopter Battalion

The assault support helicopter battalion normally operates from the division base in general support of the division. During operations in forward areas, involving an assault support helicopter battalion in direct support of a brigade or division artillery unit, a battalion forward CP may be established to provide more effective command and control. Units employed in direct support of committed brigades for extended periods usually operate from a base established within the brigade area. When involved in airmobile operations with an assault helicopter battalion, coordination with both the supported unit and the assault helicopter battalion is necessary.

7-15. Airspace Utilization

a. General. Requirements for airspace utilization and coordination for the airmobile division are essentially the same as for other Army divisions. An exception, resulting from the increased aircraft activity characteristic of airmobile division operations, is that authority is normally delegated to brigade level for establishing ATC procedures to govern organic and attached aircraft operations as a normal rather than as an expedient course.

b. Joint Aspects. Due to the relatively large number of Army aircraft used in airmobile division operations, and the anticipated frequent use of US Air Force support, airspace coordination is an important requirement. This coordination is a

responsibility of the division commander. It normally is accomplished by the division G3 through the ACE in the DTOC.

c. Control in Forward Areas. At brigade and division levels, coordination of VFR flights for ATC purposes is minimal for areas in which tactical operations are being conducted. In an airmobile division, authority for establishing ATC procedures to govern Army aircraft operations normally is delegated to the brigade commanders. Under this delegation, each brigade commander will establish ATC procedures to govern aircraft operations in his area. These procedures will be compatible with the ATC procedures used in the Army block of airspace and will include provisions for coordinating the movement of other aircraft into and out of the brigade area. For VFR operations within the division (brigade) area, local flight clearances are filed with the operations element of the unit to which aircraft are assigned or attached. When possible, appropriate entries on the local flight clearance should be completed by the pilot prior to takeoff. However, when a situation dictates, filing of the flight clearance by the pilot may be omitted. In such a case, mission requirements will be recorded and retained at the unit operations element and this record will constitute a local flight clearance. For all flights conducted under local flight clearance, the unit with which the clearance is filed will retain responsibility for flight following. Military flight plans will be filed with ATC elements for all IFR flights regardless of route or destination. Air traffic control services for IFR flights in the division/brigade area will be provided by ATC elements organic to the division (para 8-10). Where division ATC elements are inadequate for this purpose, additional support may be requested from field army ATC resources. Specific procedures for operations conducted under local flight clearances should be included in the unit SOP. This permits maximum use of the organic capability with minimum response time, yet will provide knowledge to the parent unit of the location of organic aircraft within reasonable limits (FM 1-60).



CHAPTER 8

HHC, COMBAT AVIATION GROUP

8-1. Mission

The mission of the HHC, aviation group, airmobile division (TOE 1-101T), is to furnish command, control, communications, and supply for the aviation group and to provide aviation special staff personnel for the airmobile division headquarters.

8-2. Composition

The composition of the HHC is shown in figure 8-1.

8-3. Capabilities and Limitations

a. Capabilities. At strength level 1, the HHC can—

- (1) Provide command and control, perform staff planning, and furnish communications and supervision of operations of subordinate units of the aviation group and attached units.

- (2) Provide aviation special staff personnel for the aviation group headquarters, division aviation officer's section, and the airspace control element (ACE).

- (3) Provide personnel to supervise supply, maintenance, and administration for organic and attached units.

- (4) Provide pathfinder support to elements of the division.

- (5) Provide GCA teams for the division.

b. Limitations. Limitations of the company include the following—

- (1) It is dependent upon the division administration company for personnel administration.

- (2) It is dependent upon the HHC, airmobile division, for medical service.

8-4. Group Headquarters

The functions of aviation group headquarters are discussed in chapter 7.

8-5. Company Headquarters

a. Mission. The company headquarters provides

administrative services for the group headquarters and headquarters company, to include mess, supply, quarters, communications, and maintenance of some administrative records.

b. Employment. The company headquarters is located near the aviation group CP where it performs administrative functions in support of the group headquarters and headquarters company.

c. Key Personnel. The headquarters company commander is responsible for displacing and reestablishing the group CP. He supervises administrative services such as mess, supply, and quarters for personnel of the headquarters and headquarters company and attached elements. The company commander also plans and supervises measures for security of the CP, maintains liaison with the group's unit and special staff officers, and, assisted by the first sergeant, supervises the activities of enlisted personnel assigned to his company.

8-6. Group Operations and Intelligence Section

a. Mission. The group operations and intelligence section provides personnel to operate the aviation group S2 and S3 sections.

b. Employment. Requirements of the section are to—

- (1) Plan future operations.

- (2) Recommend assignments of missions to subordinate units.

- (3) Process mission requests.

- (4) Furnish transportation to the group commander, executive officer, and S3.

- (5) Coordinate with division and supported units.

- (6) Recommend the aviation organization for combat.

- (7) Monitor immediate support requests.

c. Key Personnel. The operations plans officer and the operations officers are the principal assistants to the S2 and S3, respectively. Sufficient personnel to provide a 24-hour capability are assigned to the section.

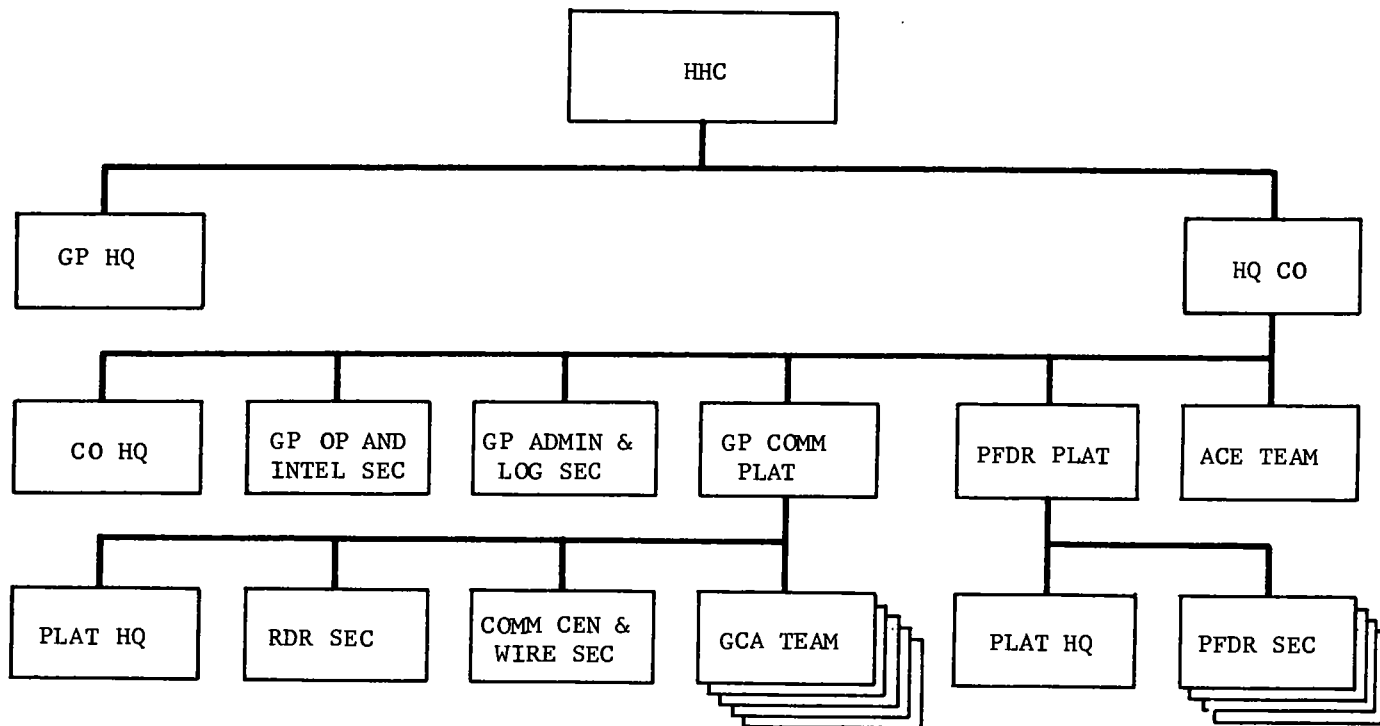


Figure 8-1. Headquarters and headquarters company (TOE 1-101T).

8-7. Group Administration and Logistical Section

a. Mission. The administration and logistical section provides administrative and logistical services for the aviation group headquarters and headquarters company. This includes mess, supply, quarters, and the maintenance of administrative records. The section provides personnel to assist in the group S1 and S4 sections.

b. Employment. The administration and logistical section is located at group headquarters. It monitors all administrative and logistical requests originating from within the group to higher or adjacent units.

c. Key Personnel. The administrative officer assists the S1 in all personnel and administrative matters. The motor maintenance officer is responsible to the group S4 in all matters pertaining to motor maintenance. The food advisor is responsible for the staff supervision of field ration mess operations within the group and provides assistance in accordance with TM 10-401. The aviation maintenance supervisor is the principal enlisted assistant to the aviation maintenance officer. He supervises aircraft technical inspectors and coordinates the aircraft maintenance activities and requirements of attached or assigned units. The avionics supervisor is the principal enlisted assistant to the aviation maintenance officer for avionics matters.

8-8. Pathfinder Platoon

a. Mission. The mission of the pathfinder platoon is to provide navigational assistance to Army aircraft through operation of en route navigation, air landing, or air delivery facilities on or over friendly, enemy threatened, or enemy dominated areas.

b. Employment. Pathfinder detachments are made available to aviation units by arrangement with the aviation group S3. Capabilities of the platoon (FM 57-38) include the following:

(1) Infiltration of an objective by any land, sea, or air means.

(2) Indicating with electronic and visual navigation aids the desired direction and route of movement for aircraft and the identity of selected points on the terrain; the identity and location of areas for air landed delivery; emergency ground-to-air signals; direction and points of landing for aircraft and the presence of obstacles to aircraft operations.

(3) Furnishing aviators and commanders information on delivery areas to include the enemy and friendly situation, terrain and weather conditions, and results of chemical agent detection tests and radiological survey.

(4) Selecting, operating, and making limited improvements to LZ.

(5) Assisting in training infantry and other divisional units in aircraft loading procedures for airmobile operations (FM 57-35).

c. Key Personnel. The platoon commander and the platoon sergeant operate the platoon headquarters. Each of the four pathfinder sections is assigned a section commander and an assistant section commander. A section sergeant and an assistant section sergeant supervise the activities of the pathfinders assigned to each section.

8-9. Airspace Control Element

The DTOC contains an airspace control element (ACE) which is staffed by Army aviation and air defense personnel. Army aviation specialists for the ACE are provided by the ACE team from the HHC of the aviation group. The ACE has a limited capability to operate simultaneously in an alternate DTOC as well as at the DTOC. Functions of the ACE include the following:

a. Serves as a source of information for current status of air defense and Army aviation capabilities.

b. In conjunction with the fire support element, determines how airspace requirements can best be met and issues necessary instructions or submits recommendations to the G3 element.

c. Provides information on aviation status and recommends the allocation and reallocation of Army aviation resources.

d. Coordinates the use of airspace.

e. Coordinates requests for support from other services.

f. Coordinates Army air defense operations.

g. Coordinates Army air traffic.

h. Disseminates intelligence information obtained through air defense channels.

8-10. Group Communications Platoon

a. Mission. The communications platoon establishes, operates, and maintains the communications system for the aviation group headquarters. It coordinates and directs the communications activities of subordinate units operating in the group communications nets. It provides general guidance for signal security and employment of electronic counter-countermeasures in unit radio operations. The platoon provides ATC services for aircraft operating in its area. The five GCA teams provide the necessary personnel and equipment to control terminal landing control facilities within the airmobile division area of operations. Normally, a GCA team will be located at the division base, one team at the instrumented airfield of each committed brigade, and a team located as required for the support command or other organic unit areas.

b. Employment. The group communications platoon headquarters is located at group headquarters. The radio section and the communications center and wire section install and operate the equipment necessary to provide radio and wire communications nets used by the aviation group. The GCA teams are employed under staff supervision of the group S3.

c. Key Personnel. The platoon leader of the group communications platoon headquarters, assisted by the communications chief, supervises the operations of the platoon. The platoon leader assists the COMMEL staff officer in planning, operating, and maintaining the group communications system. The radio section chief supervises the activities of personnel of the radio section, and the section chief of the communications center and wire section supervises the activities of personnel assigned to his section.



.

.

7



.

.



CHAPTER 9

AVIATION GENERAL SUPPORT COMPANY

9-1. Mission

The mission of the aviation general support company, combat aviation group, airmobile division (TOE 1-102T), is to provide aviation support for the division headquarters, aviation group headquarters, support command, and other units of the division without organic aircraft. The unit will provide sustained, near all-weather, day or night surveillance and acquire combat intelligence and target information for the airmobile division.

9-2. Composition

The composition of the aviation general support company is shown in figure 9-1.

9-3. Capabilities and Limitations

a. Capabilities. At strength level 1, the aviation general support company can—

- (1) Provide aerial reconnaissance and surveillance of enemy areas by visual, radar, infrared, and photographic means for the purpose of locating, verifying, and evaluating targets, conducting terrain study, and providing fire adjustment.

- (2) Provide day and night operations during visual weather conditions and limited operations under instrument weather conditions.

- (3) Provide aircraft for aerial command post, control, liaison, reconnaissance, and radio retransmission for the division.

- (4) Provide aircraft as required to supplement aeromedical evacuation missions.

- (5) Provide rapid aerial photography consisting of daylight vertical and oblique photography and night vertical photography.

b. Limitations. Limitations of the general support aviation company include the following:

- (1) The unit is dependent upon the division administration company for personnel administration, and upon the headquarters and headquarters company of the airmobile division for medical support.

- (2) It is dependent upon the military intelligence detachment attached to the airmobile division for exploitation of the acquisition capability of the aerial surveillance platoon.

9-4. Planning and Coordination

The company commander initiates and maintains close liaison with the aviation group S3 to insure that coordination and implementation of assigned missions have been accomplished. The surveillance platoon leader, acting for the company commander, coordinates directly with the division G2 air for all missions. The company is responsible for operating two airfields, an instrumented fixed wing airfield in division rear, and a division base heliport near the division main command post. The location of the heliport is coordinated with the group S3 to insure that it meets division requirements. Aeromedical evacuation missions assigned to the unit are initiated by the division medical battalion and transmitted through the group S3 to the aviation general support company. Litters can be installed in unit aircraft for this purpose.

9-5. Employment

The aviation general support company operates from two locations within the division base area. The main elements, to include the company headquarters and the surveillance, utility, and service platoons, are employed in general support of the division and operate from an instrumented, fixed wing airfield. The company also operates and maintains the division base heliport from which helicopters are employed to support the division commander and his immediate staff. These helicopters are retained at the division main heliport, but are maintained from the company's main airfield. The heliport has a day and night capability, but normally is not instrumented. When the division employs a forward TOC, the company establishes a supporting heliport with a visual flight rules (VFR) capability. The surveillance platoon operates from the division base airfield and is em-

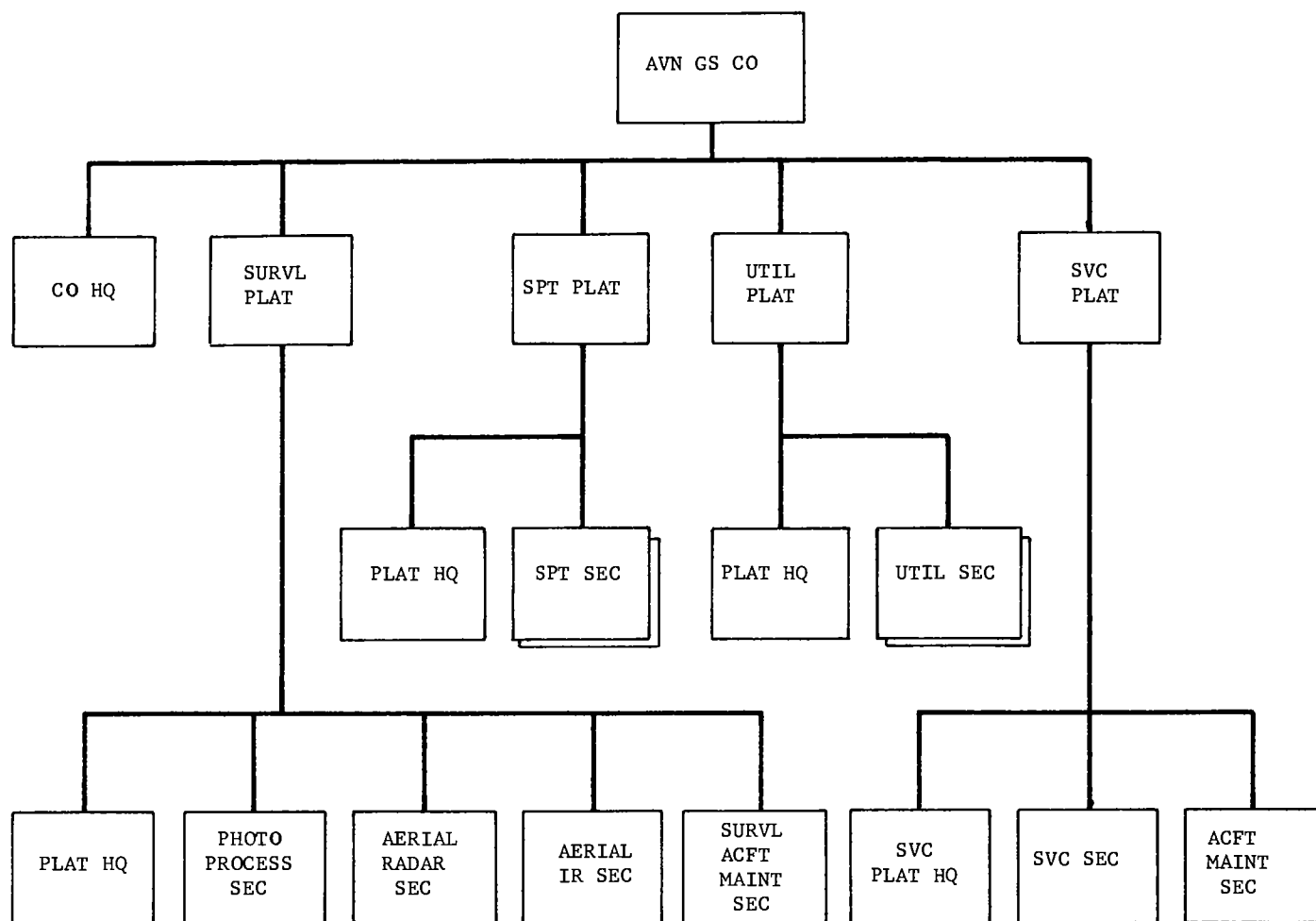


Figure 9-1. Aviation general support company (TOE 1-102T).

ployed in general support of the division through the operational control of the assistant chief of staff G2. Requests from divisional units for radar, infrared, and/or photographic missions are combined at division and programed to the surveillance platoon. Operations from brigade base areas are not anticipated because aircraft operating from the division base area can provide adequate support to the brigades. Helicopters of the company normally are employed on a mission type basis within priorities established by the general support aviation company commander and the S3 of the aviation group. Aircraft assigned on a continuous support basis are identified in the division or aviation group order. Aircraft not committed, and those due maintenance, are retained at the company's base airfield.

9-6. Company Headquarters

a. Mission. The mission of the company headquarters is to provide command, control, and ad-

ministration for organic elements of the company; to supervise flight operations, training, and supply actions; and to maintain all communications equipment for the company and provide personnel to operate the communications at the base heliport.

b. Employment. The company commander coordinates with the aviation group commander and the aviation group staff, particularly the S3, in developing plans for the employment of the company.

c. Key Personnel. The company commander advises the group S3 of the daily status of the company, with particular emphasis on his forecast of aircraft availability for the near future. He is responsible for providing a planned number of flyable aircraft on a daily basis, consistent with unit missions and required maintenance schedule. The flight operations officer assists in coordinating and planning company missions and operations, to include aviator training.

9-7. Surveillance Platoon

a. Mission. The mission of the surveillance platoon is to provide aerial surveillance to acquire combat intelligence and target acquisition information for the airmobile division.

b. Employment. The surveillance platoon, with its aerial radar and infrared sections, is employed from the instrumented airfields in the division base area. This location is desirable to minimize the effect of adverse weather conditions on platoon operations and to reduce to a minimum the time required to deliver acquired information and imagery to the user. The platoon is capable of operations in direct support of tactical units of the division, but is most effectively employed on a single aircraft mission-type basis in general support of the division. The ground sensor terminals, which receive and portray the telemetered infrared and radar imagery from surveillance aircraft, normally are monitored by G2 representatives at the airfield.

c. Key Personnel. The platoon commander is responsible for the command, control, and operation of the platoon. He keeps the company commander informed on the operational status of the platoon and advises him on platoon employment. He coordinates all activities with the division G2 and keeps him informed of any changes in his capabilities.

9-8. Support Platoon

a. Mission. The support platoon provides aviation support for units of the division that do not possess organic aircraft. The aircraft are furnished on a mission basis, utilizing light observation helicopters. This support will include reconnaissance missions, radiological surveys, special courier service, and command transport service.

b. Employment. The support platoon is located adjacent to the general support aviation company headquarters and the company flight operations in the division base area. Elements of the platoon are employed in execution of the company mission on a mission-type basis within the capabilities of the assigned aircraft and personnel. The aircraft of the platoon are equipped with dismountable, offensive-fire weapons kits for limited employment to augment other aerial weapons organic to the division.

c. Key Personnel. The support platoon commander and the platoon sergeant operate the support platoon headquarters. Each of the support sections is authorized a section leader—an aviator

—who supervises the activities of the other aviators and crew chiefs assigned to his section.

9-9. Utility Platoon

a. Mission. The mission of the utility platoon is to provide aviation support to the division commander and his staff, and to units of the division which do not possess organic aircraft on a mission-type basis; to provide limited aerial movement of combat supplies, equipment, replacements, or units for the division command element; and to provide aircraft, on a limited basis, to supplement air evacuation missions.

b. Employment. The utility platoon is located adjacent to company flight operations at the division base airfield, and the employment of the platoon is similar to that of the support platoon, including the aerial weapons capability. The significant difference is the utilization of the greater lift capacity of the utility platoon's aircraft and their instrument flight capability.

c. Key Personnel. The utility platoon commander and the platoon sergeant operate the utility platoon headquarters. Each of the two utility sections is authorized a section leader—an aviator—who supervises the activities of the other aviators and the crew chiefs assigned to his section.

9-10. Service Platoon

a. Mission. The mission of the service platoon is to perform organizational maintenance on aircraft, ground vehicles, aircraft weapons systems, small arms, and communications and avionics equipment assigned to the general support aviation company; and to provide refueling services for the company and for other aircraft, as required, at the division's main heliport and the company's fixed wing airfield.

b. Employment. The service platoon is located near the general support aviation company headquarters. In addition to maintaining and servicing organic aircraft, this platoon provides emergency maintenance and servicing to aircraft arriving at the division base heliport.

c. Key Personnel. The service platoon commander and the platoon sergeant operate the service platoon headquarters. The section leader of the service section—a warrant officer—supervises the activities of personnel assigned to his section. The helicopter maintenance technician—a warrant officer—supervises the activities of personnel assigned to the aircraft maintenance section.



CHAPTER 10

ASSAULT HELICOPTER BATTALION

10-1. Mission

The mission of the assault helicopter battalion, combat aviation group, airmobile division (TOE 1-155T), is to provide tactical mobility for combat troops, supplies, and equipment of the division during combat and airmobile operations.

10-2. Composition

The composition of the assault helicopter battalion is shown in figure 10-1.

10-3. Capabilities

At strength level 1, the battalion can—

a. Provide near continuous (day and night) operations during visual and marginal weather conditions and limited operations under instrument weather conditions in support of the division in the forward areas of the combat zone.

b. Subject to the provisions of paragraph 2-4*a*, provide airlift for the assault elements of one infantry battalion in a single lift.

c. Provide aircraft as required to supplement aeromedical evacuation missions.

d. Provide armed aerial escort for airmobile operations within the combat zone.

e. Provide routine logistical support for deployed infantry units, emergency resupply, night illumination, and dispersal of chemical agents.

f. Provide limited combat service support.

10-4. Planning and Coordination

Planning and coordination factors for the assault helicopter battalion vary according to the mission and mission plan of the supported unit. The battalion commander must keep abreast of the tactical situation and maintain his unit in a state of readiness to meet any aviation requirements placed upon him. This is accomplished through close and continuous coordination with the aviation group and the supported unit. Well developed

SOP and reliable communications are absolutely necessary for coordination and planning. Although airlift operations are standardized to the maximum possible extent, the following factors must be considered for each operation:

a. Mission and tactical plan of the supported unit, including the fire support plan.

b. Tactical situation.

c. Aircraft and aircrew availability.

d. Enemy situation and capabilities, to include air defense and tactical air capabilities.

e. Terrain and weather.

f. Combat support and combat service support availability.

g. Air defense support available.

h. Availability and suitability of aviation support from other sources, to include USAF, USN, and USMC.

10-5. Employment

The assault helicopter battalion is never kept in reserve. Normal employment is for one battalion to be placed in direct support of each supported brigade. By allocation of more airlift companies, a battalion can be structured to fit a specific mission; for a large-scale operation, one battalion can be used to reinforce another battalion. A battalion also may be augmented by another type element such as a pathfinder detachment. Other factors regarding employment of the assault helicopter battalion include the following:

a. The battalion is employed as a primary means of maneuvering troops on and about the battlefield. The assault helicopter company may support the infantry battalion, one or more infantry companies, or the air cavalry squadron. Aerial field artillery and, on occasion, air cavalry may provide direct aerial fire support for the assault helicopter battalion during a specified period. The assault helicopter battalion normally

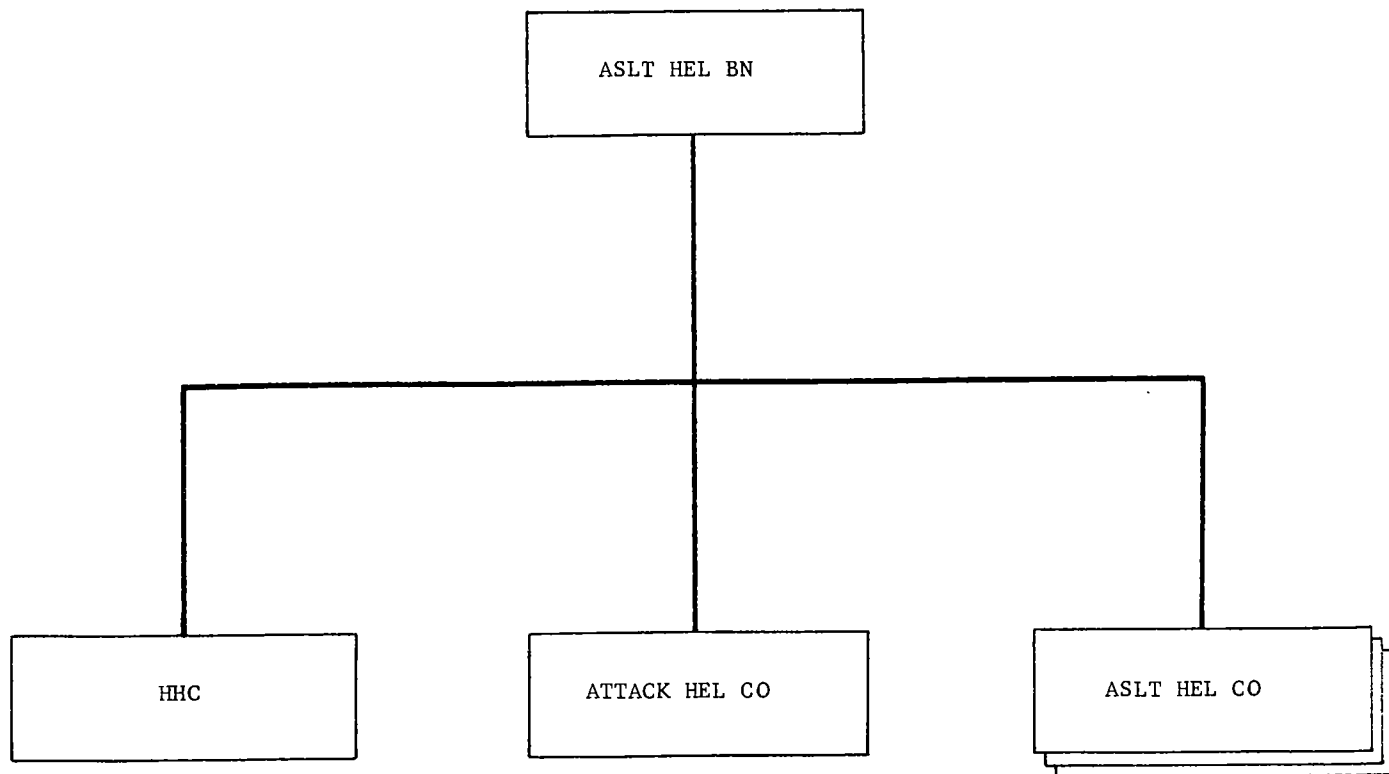


Figure 10-1. Assault helicopter battalion (TOE 1-155T).

will operate in support of an infantry brigade and its lift companies in support of infantry battalions.

b. When the battalion is assigned a mission, the commander takes immediate steps to establish communications and liaison with the units to be supported. The battalion commander personally visits with the supported units and employs his unit staff, liaison officer, and company commanders to keep abreast of the situation and requirements of the supported units, and to insure thorough planning and adequate coordination of aviation support.

c. The assault helicopter battalion commander acts as staff advisor and frequently accompanies the infantry battalion commander or staff on reconnaissance. When other aviation elements, such as assault support helicopters and aerial field artillery, are supporting an airmobile operation, their flight activities are coordinated with the assault helicopter battalion through the ACE and FSE. The commander of any group aviation unit is responsible for maintaining liaison with the group liaison officer at brigade.

d. Because of the rapid mobility of the airmobile division, the operations of the assault helicopter battalion are characterized by use of fragmentary

and mission type orders from higher headquarters and to the subordinate companies of the battalion.

e. Employment of the assault helicopter battalion in airmobile operations permits the ground force commander to take advantage of the helicopters' speed and maneuverability to accomplish a wide variety of tasks. The assault helicopter battalion provides the ground commander with capabilities to include the following:

- (1) Pose a threat which may cause the enemy to divert combat forces to maintain a strong posture in rear areas.
- (2) Overcome distances and bypass barriers in enemy defenses.
- (3) Extend the area over which he can exert his influence.
- (4) Deploy his forces more effectively by having highly mobile forces in reserve.
- (5) Gain favorable tactical mobility over enemy combat forces.

f. Types of operations in which the assault helicopter battalion can be effectively employed include the following:

- (1) Offensive.
- (2) Counterattacks.
- (3) Reinforcement.

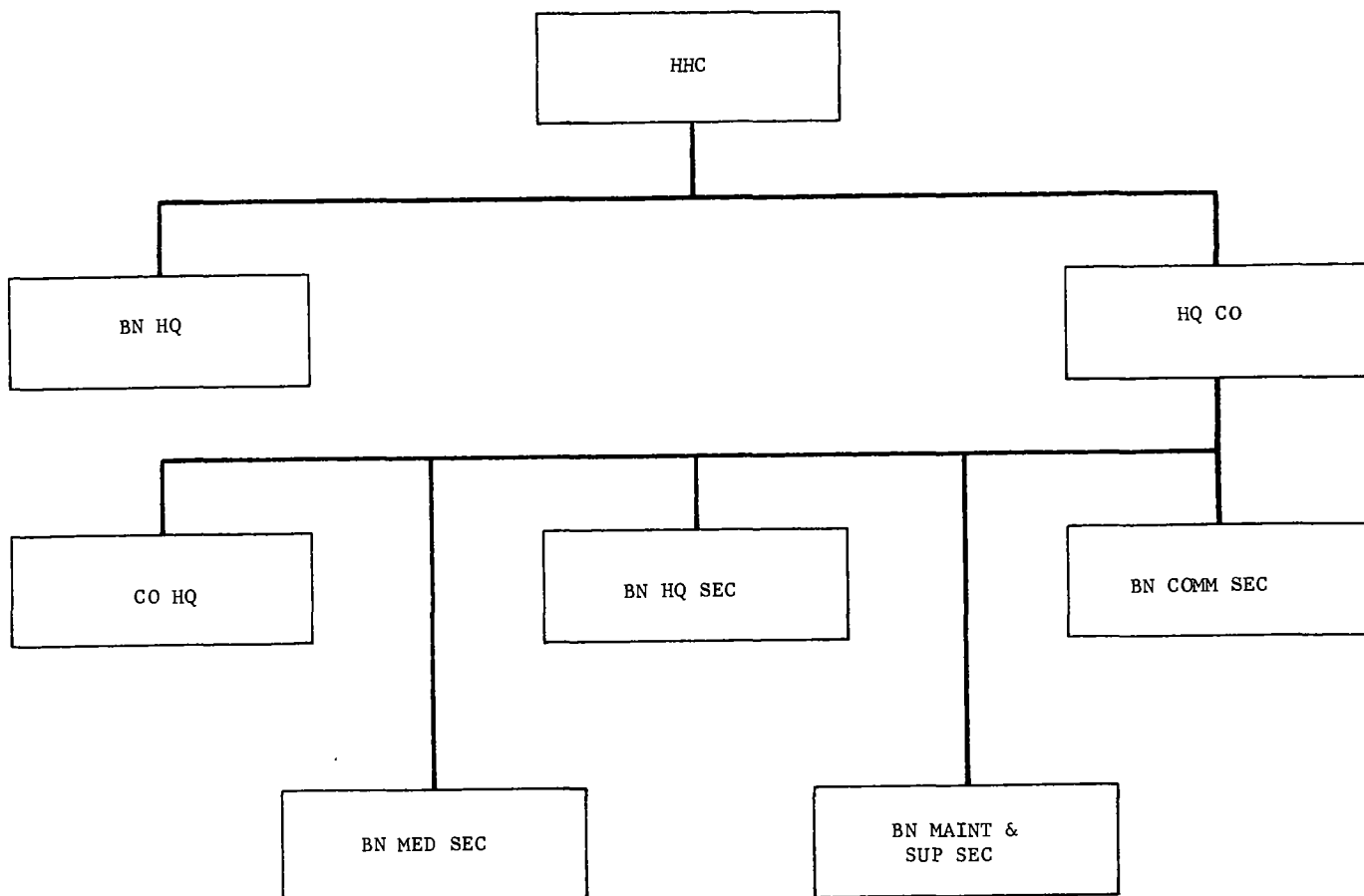


Figure 10-2. Headquarters and headquarters company (TOE 1-156T).

(4) Retrograde, to include withdrawal and retirement.

(5) Delaying actions.

(6) Relief.

(7) Feints and demonstrations.

(8) Raids.

(9) Antiairborne and counter guerrilla operations.

(10) Immediate reaction force operations.

g. The assault helicopter battalion can be effectively employed in night tactical operations. In night operations, the helicopter is less vulnerable to enemy ground and air fires, and the enemy has greater difficulty in determining the location of the main landing area. Diversionary techniques in landing of forces are extremely effective during hours of darkness and poor visibility. However, night operations require greater training, place more stress on the identification of landing areas, and also impose difficulties in navigation. Whenever possible, pathfinders are used in landing zones to assist landing control of traffic and movement of troops at night. Flares can be used to illuminate night landing operations.

10-6. Headquarters and Headquarters Company

a. General. The mission of the HHC, assault helicopter battalion, combat aviation group, airmobile division (TOE 1-156T), is to furnish command, control, staff planning, and supervision for the assault helicopter battalion. The HHC is a self-contained unit capable of independent operation and organized to provide personnel and equipment for tactical command, control, and administrative functions for assigned and attached units. Organization of the HHC is shown in figure 10-2 and component elements are discussed in *b* and *c* below.

b. Battalion Headquarters. The mission of the battalion headquarters is to provide tactical command, control, and administrative supervision of assigned and attached units. This headquarters is normally employed as a single unit, but its organization is sufficiently flexible to allow the staff to be split for operation at more than one location. It is staffed and equipped to function as a tactical command and control headquarters. Aircraft support

for command and control is provided by the company headquarters. The command group maintains continuous communications with the command post to insure timely exchange of essential information.

c. Headquarters Company. Elements of the headquarters company are as follows:

(1) *Company headquarters.* The company headquarters provides administrative services for the battalion HHC. These services pertain to individual requirements of assigned personnel to include mess, supply, quarters, supervision of non-duty activities, and the maintenance of some administrative records. The company headquarters is located near the battalion CP. It is a house-keeping element and normally operates from one location, but can operate from two locations. In displacements, the headquarters company commander is responsible for locating and securing the elements of the battalion CP and the headquarters company elements in the new position. Organizational maintenance of ground vehicles of the headquarters is performed by the mechanics of this section.

(2) *Battalion headquarters section.* Personnel of the battalion headquarters section assist the battalion commander and staff members assigned to battalion headquarters. Although there is some flexibility in the assignment of personnel, depending on the commander's policies and day-to-day changes in requirements, personnel of the section normally are employed as follows:

(a) The flight operations officer acts as assistant to the battalion S3 and supervises the activities of the operations sergeant, assistant operations sergeant, chemical NCO, draftsman, and the flight operations specialist.

(b) The airfield control personnel work under supervision of the S3 and/or the COMMELO officer.

(c) The personnel staff NCO and the mail delivery clerk assist the S1.

(d) The clerk typists and the radio telephone operators provide general support to personnel operating in battalion headquarters.

(3) *Battalion communications section.* The battalion COMMELO staff officer supervises the activities of personnel assigned to the battalion communications section. The section consists of the communications chief and sufficient radio teletype operators, switchboard operators, wiremen, and repair personnel to provide the battalion headquarters with the required communications operational capability. Organizational maintenance of

the battalion's ground FM radios is performed by this section.

(4) *Battalion medical section.* The battalion medical section operates under supervision of the battalion surgeon. The section contains the section sergeant and sufficient medical specialists to provide the battalion and subordinate units with required medical support. Generally, there will be one senior medical aidman with each assault helicopter company and two medical aidmen with the attack helicopter company.

(5) *Battalion maintenance and supply section.* This section contains the aviation maintenance officer, automotive maintenance technician, unit supply technician, and sufficient enlisted assistants to provide staff planning and supervision of the supply and maintenance functions—both ground and air—of the battalion. This section acts as the point of contact for attached or supporting maintenance elements. No aircraft maintenance is performed by the section. Vehicular organizational maintenance is performed for the subordinate units and the headquarters company. Repair parts, ammunition, and fuel are supplied to subordinate companies directly from the supply points and not through this section.

10-7. Attack Helicopter Company

a. General. The attack helicopter company, assault helicopter battalion, combat aviation group, airmobile division (TOE 1-157T) is a self-contained unit, capable of independent operation, and habitually operates from its own dispersal or assembly area. It is organized and equipped to operate as a unit, but frequently is employed in platoons or sections. Sections can operate independently with support by the parent or supported unit. Attack helicopter teams escort the assault helicopters and destroy or neutralize sources of ground fire directed at escorted helicopters en route to objective areas. They also supply neutralization fires as needed during the landings, loadings, and takeoffs of airlift helicopters in objective areas. Fires of attack helicopters operating in the escort role en route to or from objective areas normally are not included in the fire support plan; however, fires from aerial weapons systems in support of a ground commander may be integrated into the fire support plan if desired by the ground commander. When aerial weapons systems operate in an area for which a ground commander has responsibility, this direct aerial fire support comes under the control and coordination of the ground commander. Organization of the attack

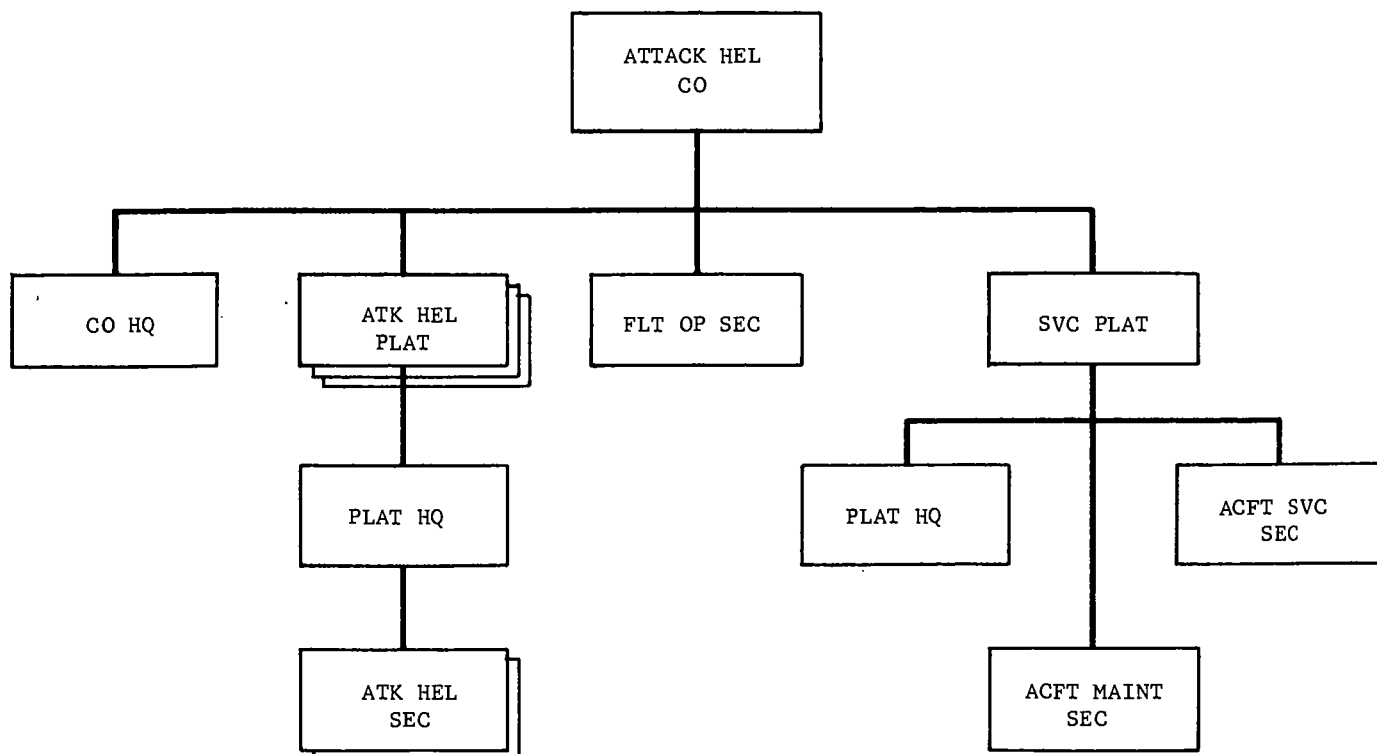


Figure 10-3. Attack helicopter company (TOE 1-157T).

helicopter company is shown in figure 10-3; subordinate elements are discussed below.

b. Company Headquarters. The mission of the company headquarters is to provide command, control, and administrative supervision of organic and attached units. It is centrally located in relation to the attack helicopter platoons, and normally is located adjacent to the headquarters company. The company headquarters consists of the company commander, executive officer, first sergeant, and sufficient personnel to perform the administrative, mess, and supply functions required by the company.

c. Attack Helicopter Platoons. Each of the three attack helicopter platoons consists of a platoon headquarters and two attack helicopter sections. The attack helicopter platoon is employed primarily to provide escort and protection to airmobile elements during movement, combat assault, or combat extraction. The platoon operates from its platoon area, which is established at a point near the company command post and service elements, and receives administrative support from its parent unit.

d. Flight Operations Section. The flight operations section consists of an operations officer, flight operations chief, communications chief, and

sufficient enlisted specialists to establish and operate the company heliport and to assist the company headquarters in operational control and administrative supervision of the company.

e. Service Platoon. The service platoon of the attack helicopter company consists of the service platoon headquarters, aircraft maintenance section, and the aircraft service section. The platoon provides organizational maintenance and services required for the company's aircraft, vehicles, weapons, and avionics equipment. The service platoon headquarters normally is collocated with the company headquarters. Elements of the aircraft service section may be attached to the weapons platoons when those platoons are operating independently, or from locations which would preclude adequate servicing from the platoon headquarters area.

10-8. Assault Helicopter Company

a. General. The mission of the assault helicopter company (TOE 1-158T), assault helicopter battalion, combat aviation group, airmobile division, is to provide tactical mobility for combat troops and materiel of the division. Three assault helicopter companies are authorized for each of the two assault helicopter battalions of the aviation

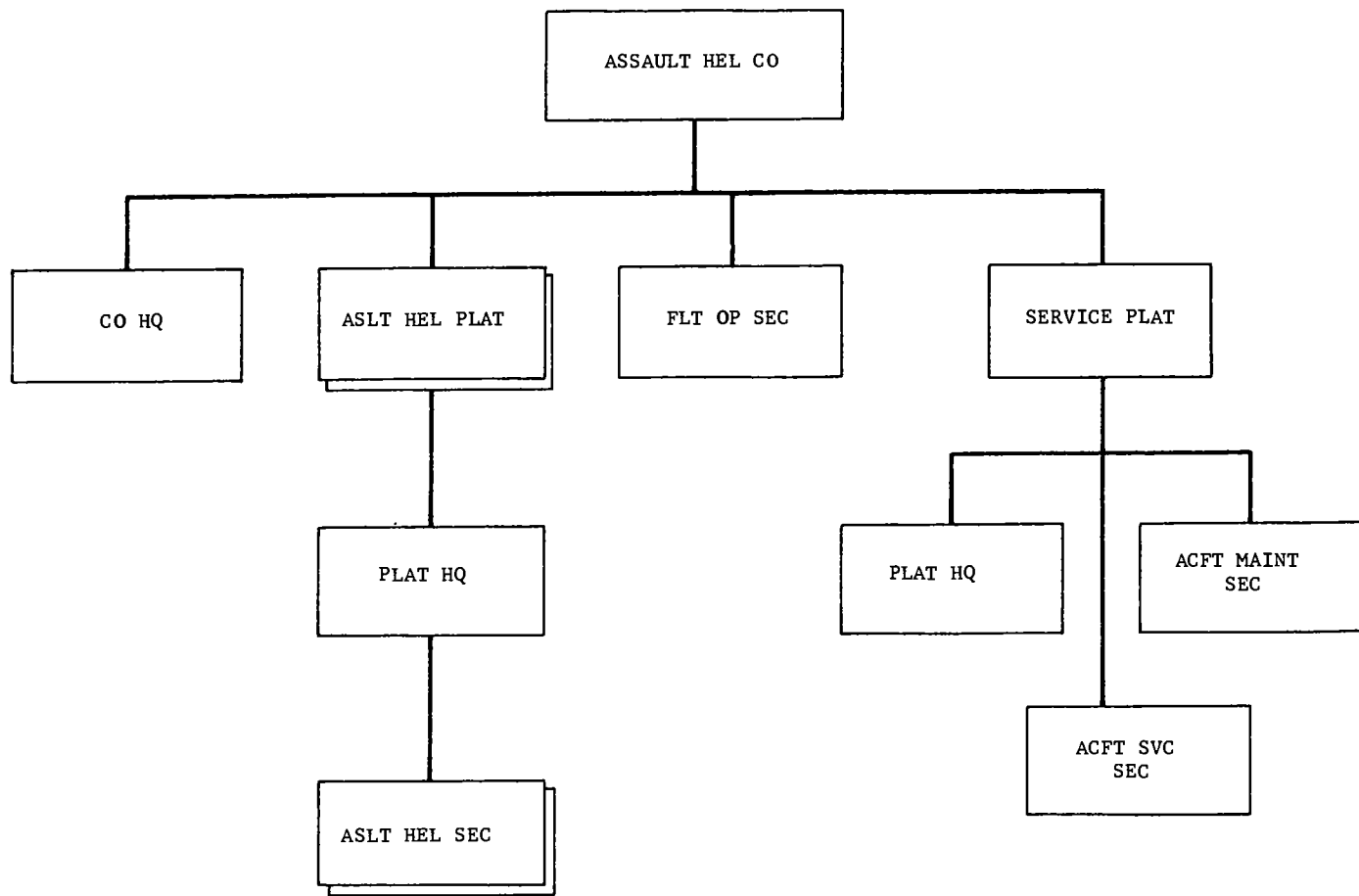


Figure 10-4. Assault helicopter company (TOE 1-158T).

group. They are organized and equipped to provide airlift for maneuvering infantry troops on the battlefield. The company normally is employed in support of the division in forward areas of the combat zone to airlift units making main or supporting attacks. For this purpose, the company is usually placed in direct support or under operational control of the unit to be supported. Aircraft of the attack helicopter company may be attached to provide escort for assault helicopters while en route to or from or landing in the objective area. Composition of the assault helicopter company is shown in figure 10-4.

b. Company Headquarters. The company headquarters consists of the company commander, executive officer, first sergeant, and personnel to perform the administrative, mess, and supply functions of the company.

c. Assault Helicopter Platoon. Each of the two assault helicopter platoons consists of an assault helicopter platoon headquarters and two assault helicopter sections. The platoon commander performs the additional duty of liaison officer during platoon size operations. Missions are received

from the flight operations section or, when temporarily detached from the company, the supported unit. The platoon usually is employed on company missions under control of the company commander, but may be employed as a separate platoon on a mission basis only. The platoon is not self-sustaining, but must rely on the company for administration and logistics.

d. Flight Operations Section. Personnel of the flight operations section include the flight operations office, flight operations chief, communications chief, and sufficient enlisted specialists to establish and operate the company heliport and to assist the company headquarters in operational control and administrative supervision of the company.

e. Service Platoon. The service platoon contains a platoon headquarters, aircraft maintenance section, and an aircraft service section. The platoon is located near the company heliport. It provides organizational maintenance and services required for company aircraft to include aircraft armament, vehicles, and avionics equipment. The platoon provides POL services to aircraft assigned to the company.

CHAPTER 11

ASSAULT SUPPORT HELICOPTER BATTALION

11-1. Mission

The mission of the assault support helicopter battalion, combat aviation group, airmobile division (TOE 1-165T), is to provide tactical air movement of combat troops and materiel in airmobile operations within the combat zone.

11-2. Composition

The composition of the assault support helicopter battalion is shown in figure 11-1.

11-3. Capabilities

At strength level 1, the battalion can—

a. Provide near continuous (day and night) operations during visual weather conditions and limited operations under instrument weather conditions.

b. Subject to the provisions of paragraph 2-4a, provide, in a single lift, lift for—

(1) The assault elements of two infantry battalions, or

(2) The combat elements of three 105mm howitzer batteries, or

- (3) 90,000 pounds of cargo, or
- (4) An equivalent logistical load.

c. Provide aircraft as required to supplement aeromedical evacuation.

11-4. Planning and Coordination

Operations of the battalion are characterized by maximum use of fragmentary and mission-type orders from higher headquarters to the battalion and from battalion headquarters to the companies. Unit operation requires rapid reaction, well developed SOP, and reliable communications. The minimum planning time available during tactical phases is balanced by a continuing need for detailed planning prior to entering the operational area. Mission planning includes consideration of the following variable factors:

a. Type of support to be provided by the aviation element.

b. Determination as to whether the battalion will displace control elements forward to support operations or remain within the division base.

c. Anticipated duration of support.

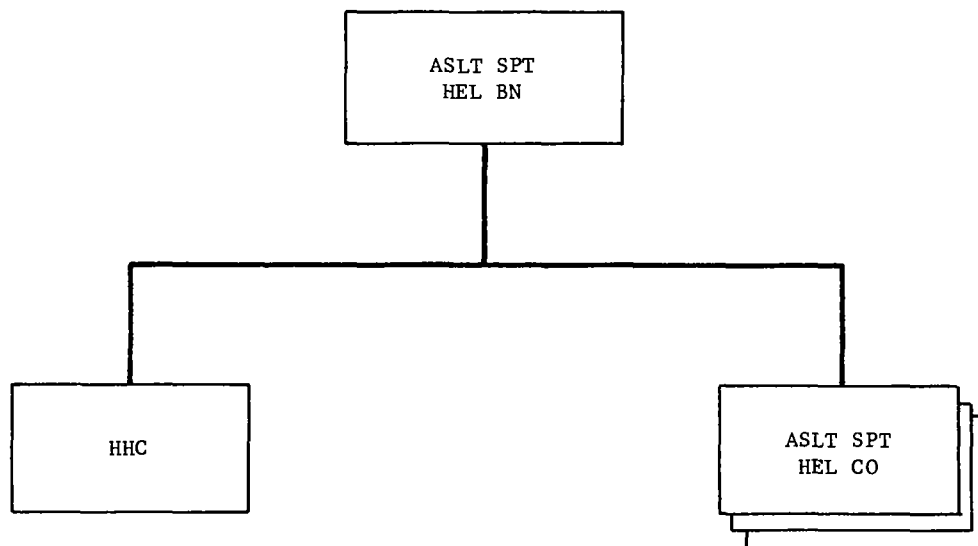


Figure 11-1. Assault support helicopter battalion (TOE 1-165T).

d. General situation intelligence briefing followed by detailed briefing on the specific area of operations.

e. Available navigation aids within the area of operations.

f. Communications procedures—

- (1) Between aircraft.
- (2) With the supported tactical unit.
- (3) Between battalion and companies.
- (4) With battalion rear CP, if operating forward.

(5) Between battalion and aviation group on both command nets and operations/intelligence nets.

(6) Maintenance of communications during displacement.

g. Coordination with Army air defense.

h. Coordination with assault helicopter units and surveillance and escort units employed in the area of operations.

i. Coordination with division support elements on the location of class IIIA supply forward support elements and estimated class IIIA requirements of support sustained operations.

j. Anticipated need for pathfinders to support terminal guidance.

11-5. Employment

The assault support helicopter battalion habitually operates in general support of the division, and one or more of its subordinate units may be placed in direct support of a brigade. In addition to performing its assigned mission, the battalion is employed as the primary means of moving artillery and combat engineer equipment on the battlefield. The battalion can be employed effectively at night, but may require pathfinder support illumination to identify landing zones. Types of operations in which the battalion may be gainfully employed include the—

a. Transport of combat support forces in offensive operations.

b. Transport of airmobile assault forces in exploitation operations.

c. Airlift of reserves.

d. Transport of combat and combat support forces in defensive actions.

e. Transport of supplies to forces in forward areas.

f. Installation of hasty minefields.

11-6. Headquarters and Headquarters Company

The mission of the HHC, assault support helicopter battalion, combat aviation group, airmobile division (TOE 1-166T), is to furnish command and control, staff planning, and supervision for the assault support helicopter battalion. The HHC is practically identical in organization and function to the HHC, assault helicopter battalion (fig. 10-2 and para 10-6).

11-7. Assault Support Helicopter Company

a. *General.* The mission of the assault support helicopter company, assault support helicopter battalion, combat aviation group, airmobile division (TOE 1-167T), is to provide tactical mobility for combat troops and materiel of the division during operations in the combat zone. Each of the three assault support helicopter companies authorized for the battalion is a self-contained unit that is capable of independent operation, and habitually operates from its own dispersal or assembly area. All authorized items of equipment, except fuel trucks, are air transportable by use of organic helicopters. The company disperses by platoon or section within the assembly area and displaces by echelon. Figure 11-2 shows the organization of the assault support helicopter company.

b. *Communications.* Telephone is the normal means of communication among elements of the company on the ground. Single sideband high frequency voice radio is used for communication with higher headquarters, flight operations center, liaison officers, supported units, and distant in-flight elements of the battalion. FM and UHF voice radio provides communication with relatively near in-flight elements.

c. *Employment.* The company is employed in support of the division, normally in forward areas of the combat zone. Although it can be fragmented into platoon-size units, the company is most effective when employed as a single unit. The company usually is placed in direct support or under the operational control of the supported unit on a mission support basis, but can be attached to a supported unit for operations covering an extended period of time.

d. *Company Headquarters.* The company headquarters consists of the company commander, first sergeant, armorer, and sufficient personnel to perform the administrative, mess, and supply functions required by the company.

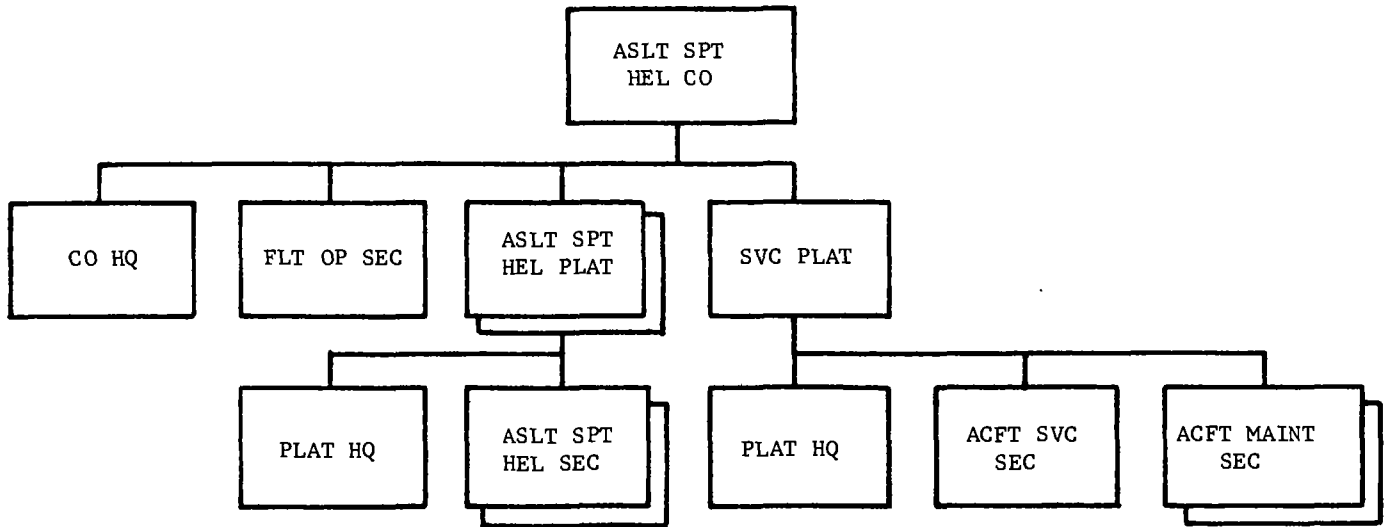


Figure 11-2. Assault support helicopter company (TOE 1-167T).

e. Assault Support Helicopter Platoon. Each of the two assault support helicopter platoons contains a platoon headquarters and two assault support helicopter sections. The platoon commander is assisted by the platoon sergeant in exercising command and control of the platoon and performs the additional duty of liaison officer during platoon-size operations. Missions are received from the operations section or, when temporarily detached from the company, the supported unit. Each assault support helicopter section contains a section commander and the aviators, flight engineers, and crew chiefs who operate and perform organizational maintenance of the section's helicopters.

f. Flight Operations Section. The flight operations section consists of the flight operations of-

ficer, flight operations chief, communications chief, and other personnel needed to perform the company's operations and communications functions. When operating in a combat theater, crews must be supplemented with additional gunners to man the M-24 armament subsystems which provide a suppressive fire capability.

g. Service Platoon. The service platoon of the assault support helicopter company consists of the service platoon headquarters, an aircraft service section, and two aircraft maintenance sections. The platoon provides organizational maintenance and services required for company aircraft to include aircraft armament, vehicles, and avionics equipment, and provides POL services to aircraft assigned to the company.



PART FOUR

COMBAT AVIATION BATTALION, GROUP, AND BRIGADE (NONDIVISIONAL)

CHAPTER 12

GENERAL

Section I. INTRODUCTION

12-1. Major Functions

This chapter describes the combat aviation battalion, group, and brigade, nondivisional, which provide aviation combat support to field army, task force, corps, and divisional organizations conducting land combat operations. These aviation organizations are an integral part of the combat support system designed to provide immediate and effective aviation support throughout the combat zone. The composition of a type combat aviation brigade, to include type aviation group and battalion elements, is shown in figure 12-1.

12-2. Capabilities

The HHC of the nondivisional combat aviation battalion, group, or brigade is staffed to provide command, control, and planning necessary for the employment of its assigned and attached units. Aviation elements are assigned or attached to the HHC to provide the Army aviation capabilities needed by the ground force which is to be supported.

12-3. Combat Service Support

Freedom of use permits a commander to employ

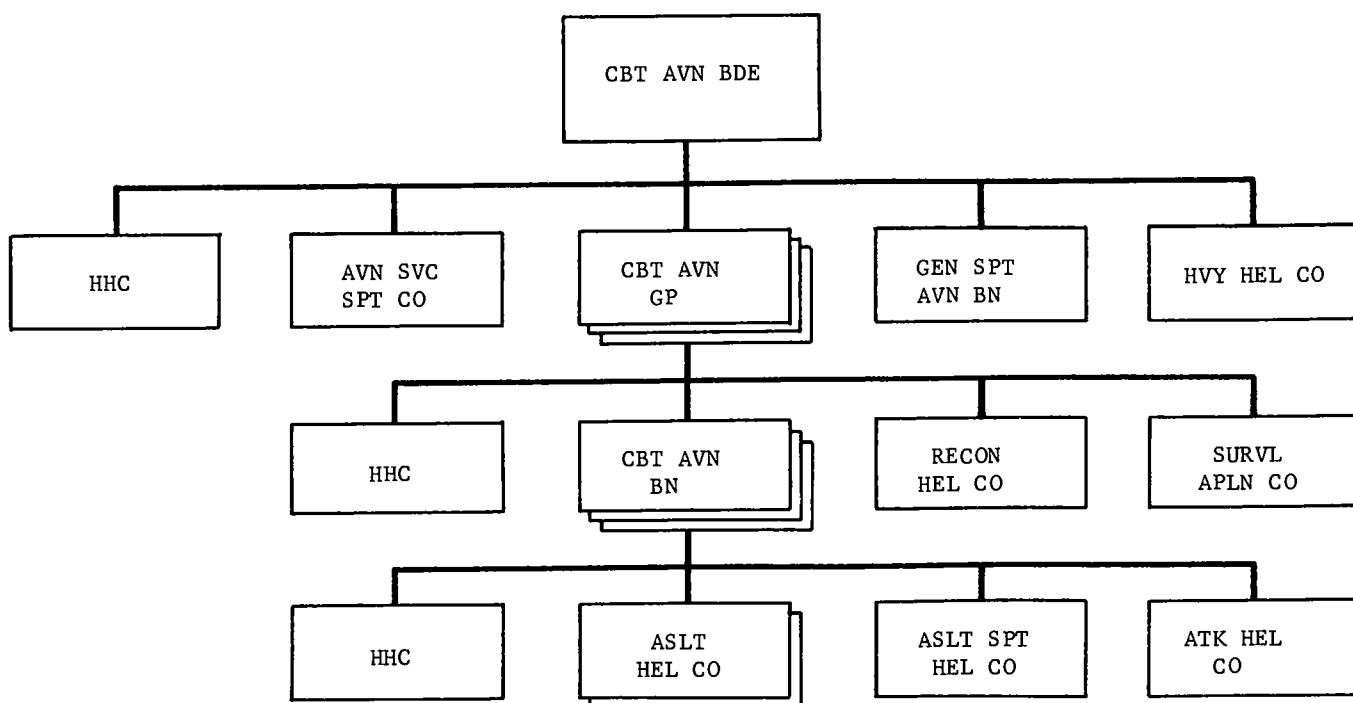


Figure 12-1. Type combat aviation brigade, nondivisional.

organic, attached, or supporting Army aviation units in the way that contributes most to the successful accomplishment of his mission. This can mean that aviation units which are primarily combat support oriented can be called upon to perform combat service support tasks when the situa-

tion requires. Army aviation units, especially those possessing utility or cargo helicopters, are capable of airlifting personnel and materiel in both the combat support and combat service support modes. Army air transport operations are discussed in detail in FM 55-46.

Section II. THE BATTALION

12-4. Mission and Responsibilities

The mission of the nondivisional combat aviation battalion is to provide tactical airlift of combat units, air resupply, armed aerial escort, and aerial battlefield surveillance in support of ground combat operations. The battalion also provides command and control aircraft, augments medical evacuation means, and provides direct aerial fire support to include neutralization and defensive fires in objective areas. Functions of the battalion HHC are discussed in chapter 13.

12-5. Assignment

The combat aviation battalion may be assigned to an aviation group, to an aviation brigade, or to a maneuver unit headquarters. The battalion may also operate independently in support of ground tactical operations.

12-6. Composition

There is no fixed composition for the nondivisional combat aviation battalion. The battalion may be structured to include any mix of units under operational control of the battalion's parent group. The composition of a specific battalion is largely dependent upon the factors of assigned mission, operational environment, aviation resources available, and composition of hostile forces most likely to be encountered. Figure 12-1 includes an illus-

tration of one of the ways in which the battalion can be structured to accomplish a specific mission.

12-7. Employment

The nondivisional combat aviation battalion is tactically structured to provide aviation support to land forces conducting operations in the combat zone. Its lift elements provide tactical airlift of troops and materiel for airmobile operations. Its armed helicopters provide aerial escort and neutralization fires for battalion elements performing airlift missions. The battalion has the capability of providing timely information on enemy activity and movement. It can transport additional troops and materiel to sustain positions already under control of friendly elements, and can airlift combat assault elements to block avenues of approach and likely escape routes.

12-8. Aircraft Maintenance

A transportation aircraft maintenance detachment may be attached through battalion to the aviation company to provide aircraft maintenance at the direct support (DS) level. When this is the case, the maintenance detachment receives its backup support from a DS aircraft maintenance company. If a transportation aircraft maintenance detachment is not attached, the aviation company will receive its DS-level maintenance from the DS aircraft maintenance company.

Section III. THE GROUP

12-9. Mission and Responsibilities

The mission of the nondivisional combat aviation group is to provide aviation support to land forces engaged in combat operations under all conditions of land warfare. Depending on its mission, the group commands or exercises command, less operational control, over those units attached to it. Functions of the group HHC are discussed in chapter 14.

12-10. Assignment

The assignment of the group depends upon the mission, type and expected duration of the operation, geographic area of operation, and the composition of units it is to support. The group normally will be assigned at corps or higher level to provide maximum support and to fully utilize the combat potential of the group's assets.

12-11. Composition

The group consists of an HHC and two or more combat aviation battalions. Composition of the group is not fixed, but consist of aviation battalions and separate aviation companies most suited to assist in accomplishment of the supported unit's mission. A type group is included in figure 12-1.

12-12. Employment

a. The group is employed as directed by the supported commander. The group headquarters normally is located near the supported headquarters, and provides the tactical command and control required for employment of attached or assigned aviation units. Adequate communications and personnel are available to enable the group headquarters to function as an emergency or alternate Army aviation staff section.

b. The group headquarters is staffed and equipped to be a tactical command and control headquarters. Personnel are provided to supervise

the administrative and logistical functions of subordinate units.

c. The group headquarters assists the supported unit commander by providing command and control for subordinate group units, thus reducing the span of control. When two or more aviation battalions are allocated to support the land combat force, the group commander will supervise the activities of these aviation battalions. This reduces to one the number of aviation unit headquarters dealing with the supported unit headquarters.

d. The group operates from dispersed locations within the tactical area of operation, and generally is located in the vicinity of a supported unit to gain the necessary security.

e. Mission-type orders are used between aviation units for operations to insure rapid response to aviation requirements of the supported unit.

f. Effectiveness of aviation operations is increased by use of SOP. Details covering the conduct of all tasks within the capabilities of the group should be outlined in the unit SOP.

Section IV. THE BRIGADE

12-13. Mission and Responsibilities

a. The mission of the nondivisional combat aviation brigade is to provide tactical airlift of combat units, aerial battlefield surveillance, aerial resupply of units engaged in combat operations, and other combat support as required.

b. Responsibilities of the brigade include planning for combat operations in conjunction with higher headquarters, to include allocation of aviation assets and administrative supervision of subordinate units. Functions of the brigade HHC are discussed in chapter 15.

12-14. Assignment

The assignment of the brigade is dependent upon the extent to which Army aviation support is required in an area of operations. Normally, the brigade is assigned to a corps or field army. It operates from the most forward area commensurate with its assignment to allow immediate responsiveness to the needs of the supported commander.

12-15. Composition

a. A typical aviation brigade consists of an HHC and two or more combat aviation groups. A type brigade is shown in figure 12-1.

b. The composition and strength of units assigned to the brigade are determined by the theater army commander. His basis for decision normally is dependent upon—

(1) Plans for Army aviation to support future operations.

(2) The characteristics of the area of operations as they affect intelligence, mobility, and firepower.

(3) The type and composition of hostile forces most likely to be encountered.

12-16. Employment

a. The brigade normally is employed in general support of, and receives missions from, a corps or field army. The brigade subsequently assigns missions to those of its units most capable of performing the missions. Subordinate units of the brigade are attached or placed in direct support of committed tactical units for operations. Additional aviation support may be provided by units in general support or reinforcing roles.

b. Elements of the brigade operate from dispersed locations within the assigned area. In a stability operations environment, the brigade's operational units normally are collocated with ma-

neuver units for security and to provide immediately responsive support.

c. To insure maximum responsiveness to changing tactical situations, mission-type orders are used between the brigade headquarters and its subordinate groups. This responsiveness is attained through a high state of training in airmobile techniques and procedures that are known and

understood by both supporting and supported units. Aviation procedures for support of tactical operations are essentially the same whether they are offensive, defensive, retrograde, or special operations. These procedures are implemented by aviation unit commanders, through either personal contact or liaison teams. Thorough coordination is required to insure that the tactical mission is accomplished rapidly and effectively.

CHAPTER 13

HHC, COMBAT AVIATION BATTALION (NONDIVISIONAL)

13-1. Mission

The mission of the HHC of the combat aviation battalion (nondivisional), TOE 1-256, is to provide command, control, staff planning, supervision, and coordination of all assigned and attached units, and to employ these units in support of ground operations incidental to combat.

13-2. Assignment

The HHC, combat aviation battalion (nondivisional) is assigned to the field army or corps aviation group when the primary mission is tactical transport, and to the field army support command aviation group when the primary mission is logistical support.

13-3. Composition

The composition of the HHC, combat aviation battalion (nondivisional), is shown in figure 13-1.

13-4. Planning and Coordination

a. When the battalion is assigned a mission, the commander takes immediate steps to establish liaison with the ground combat unit. Coordination between these units is continuous and simultaneous with planning to insure that problem areas are identified and resolved as quickly as possible.

b. Operational requirements, normally received from higher headquarters as mission-type orders, are relayed from battalion to the subordinate aviation elements concerned with the operation.

13-5. Employment

a. *General.* Each section of the battalion HHC is responsible for providing the necessary personnel and equipment to meet the administrative and operational requirements of the battalion headquarters.

b. *Battalion Headquarters.* The battalion headquarters is organized to provide tactical command, control, and administrative supervision of as-

signed and attached units. In addition to the battalion unit staff, the commander is assisted by a special staff which normally includes the aviation safety officer, the aviation medical officer, and the aircraft maintenance officer. During internal defense and development operations, a civil-military operations officer (S5) may be authorized. In the absence of an S5, civil-military operations functions are usually a staff responsibility of the battalion S3. Alternatively, the commander may appoint an officer to handle civil-military operations functions on a full-time basis.

c. *Headquarters Company.* Elements of the headquarters company are as follows:

(1) *S1 section.* The S1 section provides administrative support for the battalion HHC and has staff responsibility for all matters pertaining to administration, awards and decorations, public information, and safety. The battalion S1 is responsible for accomplishing these functions. The battalion aviation safety officer, who reports directly to the battalion commander, may be collocated with this section.

(2) *S2/S3 section.* Since their functions are complementary, the S2 and S3 sections may be collocated. However, whether collocated or not, the duties of each section are separate and distinct as follows:

(a) *S2 section.* The battalion S2 is responsible for advising the commander, staff, and subordinate units, and other interested agencies on the terrain, weather, and the enemy situation. When a pathfinder detachment is attached, the pathfinder commander coordinates matters concerning the enemy, weather, and terrain with the S2. The S2 also supervises and trains battalion intelligence personnel, and exercises control over all intelligence activities of the battalion.

(b) *S3 section.* The S3 is responsible for all matters pertaining to staff planning in preparation for an operation. He maintains close liaison with other staff officers to insure that proper coordination is accomplished at all levels. He plans and supervises all training conducted in the battalion

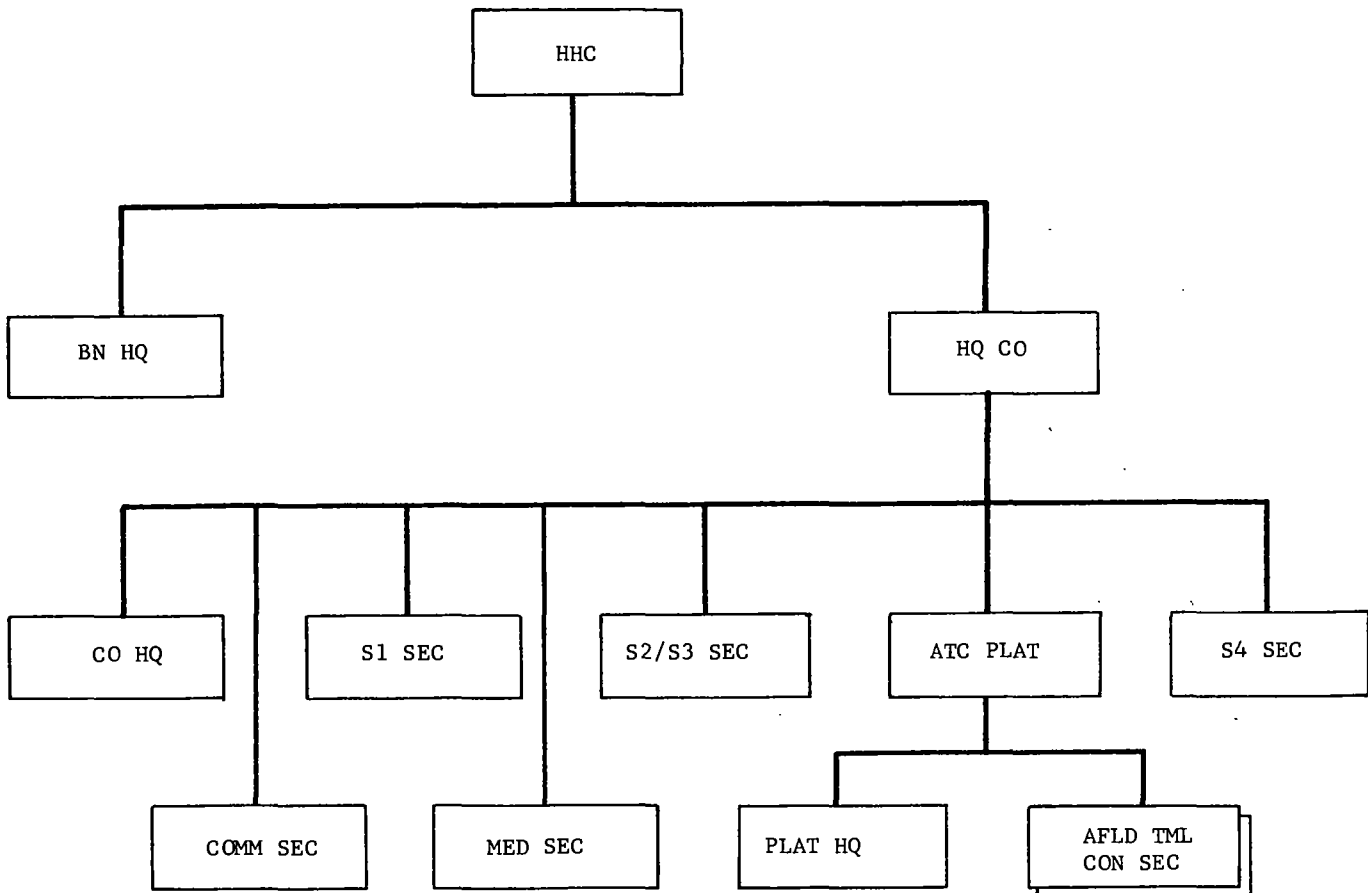


Figure 13-1. Headquarters and headquarters company (TOE 1-256).

in accordance with guidance from the next higher headquarters. The pathfinder detachment, if attached, functions under staff supervision of the S3.

(3) *Air traffic control platoon.* The ATC platoon is capable of establishing and operating two airfield terminal control facilities for use by battalion aircraft elements operating in areas in which these facilities are not otherwise available. The platoon maintains communications with the FOC/FCC, which is responsible for the area in which operations are being conducted, to receive information on weather conditions, IFR clearances, planned artillery fires, and other factors affecting flight operations.

(4) *S4 section.* This section, under supervision of the battalion S4, is responsible for staff supervision and coordination of all maintenance, supply, evacuation, and transportation activities within the battalion. The section has staff responsibility for overall aircraft and vehicle maintenance within the battalion, for coordinating the maintenance activities of the organic unit maintenance

officers, and for coordination of the battalion's requirements for higher level maintenance support. The section also has staff responsibility for planning, coordinating, and supervising the operation of the logistical facilities of the battalion, and for insuring that nonorganic combat service support elements adequately support the plans of the command, and that they function according to the orders of higher commanders.

(5) *Communications section.* The COMMEL staff officer reports to the commander on all matters pertaining to communications support—both internal and external—in the battalion. He normally functions as a special staff officer. He coordinates and directs the communications activities of organic and attached units operating in the battalion communications net, and supervises the battalion's avionics activities.

(6) *Medical section.* The medical section provides unit-level medical service to battalion personnel. The surgeon is organizationally located on the commander's staff and normally has operational control of the medical section.

CHAPTER 14

HHC, COMBAT AVIATION GROUP (NONDIVISIONAL)

14-1. Mission

The mission of the HHC of the combat aviation group (nondivisional), TOE 1-252, is to provide command, staff planning, and control of operations of attached aviation battalions and separate aviation companies.

14-2. Assignment

The group HHC may be assigned to a field army, corps, or task force. It is allocated on an as-required basis to control the operations of three to seven aviation battalions. The group normally will be assigned at corps or higher level to reduce the span of control of the supported headquarters over assigned or attached aviation battalions and separate aviation companies. The group may be assigned down to division level to provide support for a special independent type of operation.

14-3. Composition

The composition of the group HHC is shown in figure 14-1.

14-4. Planning and Coordination

a. Planning. The airmobile task force (AMTF) commander is the overall commander during airmobile operations; therefore, planning for the aviation group actually begins when the AMTF commander foresees the need for aviation support and includes the aviation group commander in the initial stages of planning an operation. The aviation group commander or his liaison officer keeps the AMTF commander informed on the current aviation situation and airlift support available.

b. Coordination. Close coordination between the aviation group and the commander and staff is essential to insure that the required complex schedule of delivery of troops and materiel is met. Minute coordination with ground fire support, organic direct aerial fire support, and tactical air support elements is mandatory to obtain maximum support from these elements with minimum

restrictions upon the operation. Continuous liaison between the supported ground task force and the aviation group is necessary to insure a successful operation.

14-5. Employment

The combat aviation group and its assigned or attached units are deployed as directed by the aviation commander to meet the tactical needs of the ground force. The group HHC provides the tactical command and control required for the employment of all units assigned or attached to the group. The HHC normally is located near the task force headquarters to insure maximum staff coordination. Functions of individual elements of the group are discussed below.

a. Group Headquarters.

(1) *General.* The group headquarters provides command and control for its subordinate units. Mission-type orders normally are used for these units to insure maximum responsiveness to aviation requirements of the ground force. The headquarters issues orders, assigns missions, and maintains coordination with its elements concerning aviation support for combat elements of the ground force.

(2) *Duties of personnel.* Group headquarters consists of the group commander, executive officer, group staff, special staff, and the sergeant major. These personnel provide supervision of the normal staff sections in a tactical headquarters and give supervisory assistance to subordinate units.

(a) *Group commander.* The group commander performs the functions of commander of the combat aviation group and acts as an aviation advisor to the headquarters to which the group is assigned or attached. As the group commander, he is responsible for the command and control of his subordinate units. He formulates plans, issues orders, and supervises the operation of any units assigned or attached to the group. As an aviation advisor, he advises the AMTF commander on matters relating to employment of Army aviation assets. In this capacity, he is the primary advisor

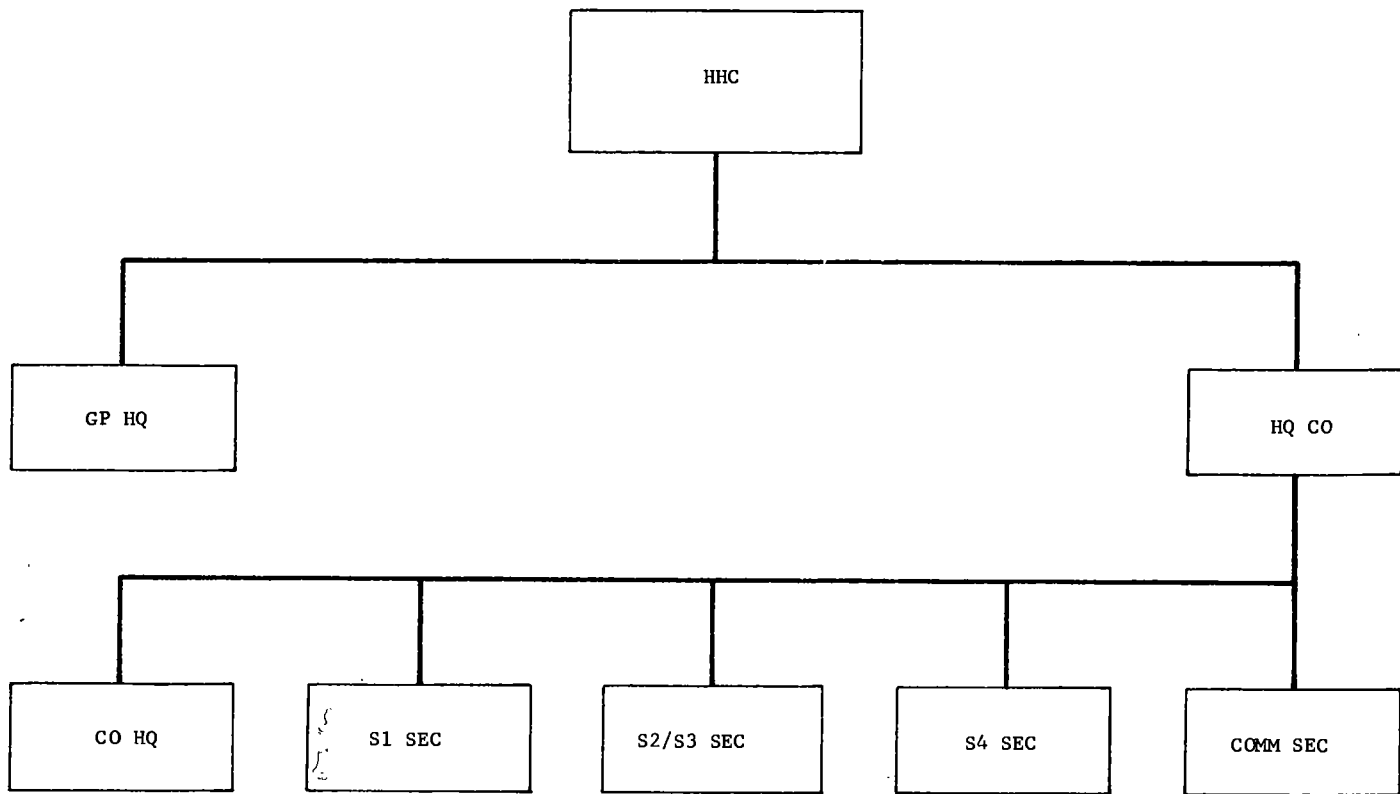


Figure 14-1. Headquarters and headquarters company (TOE 1-252).

on aviation matters such as allocation of resources, safety, standardization, and maintenance.

(b) *Executive officer.* The executive officer is the principal assistant and advisor to the group commander. He performs duties similar to those of a chief of staff. He is responsible for execution of staff tasks, the efficient and prompt response of the staff, and the coordinated effort of staff members.

b. Functions of Sections.

(1) *Company headquarters.* The company headquarters consists of the company commander, first sergeant, supply sergeant, motor sergeant, clerks, vehicle mechanics, and other personnel necessary to accomplish the administrative, mess, and maintenance functions of the HHC.

(2) *S1 section.* This section performs personnel and administrative functions to include the following:

(a) Maintenance of unit strength data, records, and reports showing status of personnel matters and replacement activities.

(b) Procurement, classification, assignment, promotions, transfers, separations, and rotations.

(3) *S2 section.* The S2 section, which normally is collocated with the S3 section, performs the following functions:

(a) Maintains the enemy situation map and prepares flak overlays from hit-and-fired-at reports from subordinate units.

(b) Processes security clearances, and coordinates with the S1 section to insure that replacement personnel have required security clearances prior to assignment to subordinate units of the group.

(c) Disseminates to appropriate elements spot reports on enemy activity received from returning aircrews.

(d) Receives and expedites requests for ground and aerial reconnaissance and surveillance, to include visual and sensory type missions.

(e) Directs, supervises, and coordinates the collection of information on enemy, weather, and terrain, using all the resources at his disposal.

(4) *S3 section.* The S3 section, which normally is collocated with the S2 section, performs the following functions:

(a) Develops and writes operations plans and orders for multibattalion operations in support of the ground tactical plan.

(b) Schedules aircraft operating within the group headquarters, to include aircraft used to provide an aerial CP for the group commander, and to provide liaison and command transportation for the group headquarters.

(c) Prepares allocation of aircraft based on the scheme of maneuver of the supported unit.

(d) Maintains and supervises the group combat operations center.

(e) Provides the nucleus of the advance command post.

(f) Establishes and monitors training programs for the HHC.

(5) *S4 section.* The S4 section performs the following maintenance and supply functions:

(a) Coordinates the aircraft maintenance activities of attached or assigned aviation units.

(b) Coordinates with maintenance support units to meet current and projected workloads.

(c) Plans, coordinates, and supervises the logistical functions of the group.

(d) Maintains close coordination with the supported headquarters logistics officer, appropriate support command, or supporting supply unit on logistical matters relating to the group.

(6) *Communications section.* Under supervi-

sion of the group COMMEL staff officer, this section—

(a) Installs, operates, and maintains the group communications system.

(b) Provides staff coordination of the group's avionics activities.

(c) Establishes wire and radio nets with higher, lower, and adjacent headquarters.

(d) Provides technical supervision of communications nets of assigned and attached aviation units.

(e) Prepares signal operation instructions (SOI) and standing signal instructions (SSI) for the group.

(f) Prepares new calls and assigns new frequencies in accordance with established procedures at the beginning of each unit operation or when the SSI or SOI have been compromised.

(g) Reports to the group S2/S3 all actual or suspected jamming (to include type) and imitative communications-noncommunications activities by the enemy.

(h) Monitors the signal security and electronic counter-countermeasures training program to insure that operators react properly to enemy attempts at jamming friendly radio communications and to enemy intrusion into nets with imitative communications (FM 32-5 and FM 32-20).



CHAPTER 15

HHC, AVIATION BRIGADE (NONDIVISIONAL)

15-1. Mission

The mission of the headquarters and headquarters company, aviation brigade (nondivisional) TOE 1-66, is to provide command, staff planning, and administrative and logistical supervision of assigned or attached aviation groups, battalions, separate companies, and other attached elements.

15-2. Assignment

The brigade HHC normally is assigned to a field army or task force as required in stability operations.

15-3. Composition

The composition of the brigade HHC is shown in figure 15-1.

15-4. Capabilities

At strength level 1, this unit has the following capabilities:

a. Provides command, staff planning, and supervision of the training, operations, logistics, and administration of assigned and attached units.

b. Provides administration, mess, organizational maintenance, supply, motor transport, and local security for the brigade headquarters.

c. Plans for future operations to include recommendations on nondivisional aviation requirements, employment, and utilization.

d. Operates the brigade communications system and directs the allocation, resupply, and maintenance of the avionics and signal equipment.

e. Provides aircraft to facilitate the command, control, and coordination of brigade activities.

f. Establishes and supervises the brigade safety program to include safety surveys, seminars, advice on aircraft accident investigation, and review of aircraft accident reports.

15-5. Planning and Coordination

a. General. The extent and type of involvement in planning and coordination of tactical operations by the brigade headquarters depends upon its assignment. The difference between a tactical and an administrative headquarters is the difference between having command only or having both command and operational control of its assigned/attached units. In either case, the command aspect normally is constant, while operational control of assigned/attached units may be passed to other major headquarters which the brigade supports. As a tactical headquarters, the brigade is directly involved in the planning and conduct of tactical operations. It exercises operational control over its subordinate units in support of ground operations. In the administrative role, the brigade headquarters (even though it does not have operational control) must still be able to influence the employment of its units through its function of command and also as a result of direct contact association and coordination between the brigade commander and the ground commanders of the major units it supports. The brigade commander normally performs the functions of both brigade commander and aviation officer of the supported headquarters. As a commander, he must thoroughly understand the operational techniques of his assigned/attached units. He makes decisions and issues orders through his subordinate commanders; he prescribes policies, assigns missions, and designates tasks for units under his control. As an aviation officer, he keeps the commander of the supported headquarters informed and advised on matters concerning the employment of the brigade's assets. In this capacity, he serves as the primary advisor on aviation matters such as allocation of resources, safety, standardization, and maintenance.

b. Concurrent Planning. The degree of success with which aviation units are able to support combat operations depends upon the establishment of airmobile techniques and procedures which are known and understood by both the aviation and

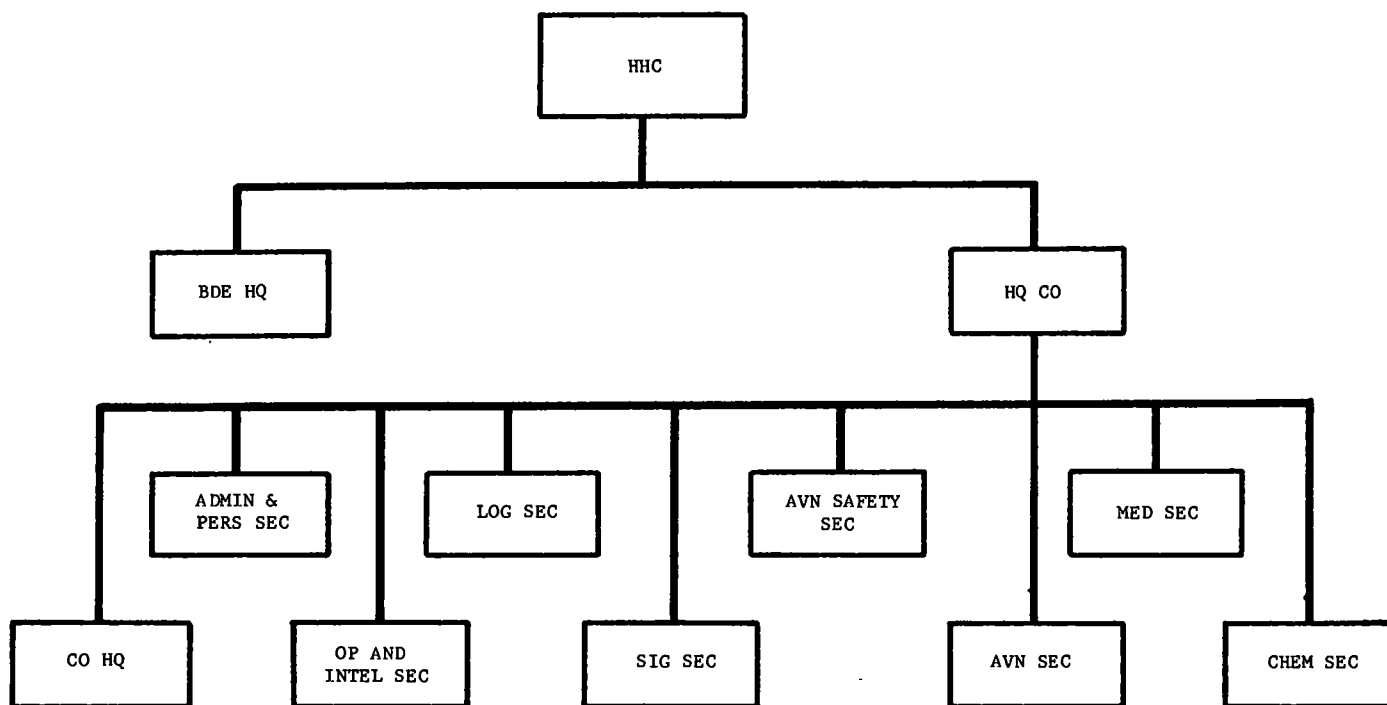


Figure 15-1. Headquarters and headquarters company (TOE 1-66).

supported units. Concurrent planning of operations is essential. If the brigade is performing the function of a tactical headquarters, the brigade commander, staff, and liaison elements must become involved in the planning of operations from the earliest possible moment, and must continue until the operation is completed. This planning is performed most effectively by active participation of the commander and staff, and by liaison teams semipermanently attached to major supported headquarters. If the brigade headquarters is administrative in nature, it will not be directly involved in the allocation and command and control of aviation units during combat operations. However, every measure must be taken to insure concurrent planning with the supported headquarters, and to monitor the planning and execution of combat operations by its assigned/attached units.

c. Coordination. The most effective use of Army aircraft in combat operations is accomplished through closely knit teamwork that comes from constant association of the aviation group and ground units at the lowest operational level. As a tactical headquarters, the brigade will maintain contact with its ground counterparts as well as with its own units. Coordination must be accomplished in such a manner as to minimize loss of time in performing the mission. As an administra-

tive headquarters, the brigade functions much the same as other type support headquarters.

15-6. Employment

a. General. The brigade HHC functions the same as similar type units in that each section has its distinctive missions. Each section provides the necessary personnel and equipment to meet the administrative and operational requirements of the brigade headquarters.

b. Brigade Headquarters. The brigade headquarters provides command, staff planning, control, supervision, and coordination of assigned/attached Army aviation and supported units. Depending upon its assignment, the brigade headquarters may place emphasis on all of the above, or it may place particular emphasis on a few. When operating as a tactical headquarters, with the majority of the brigade's assets employed, the brigade commander becomes the principal advisor to supported units, and his staff members become the principal coordinators. Normally, the brigade is in general support, with its subordinate units in general or direct support. When employed as an administrative headquarters, the brigade commander and his staff become principal advisors and coordinators to their supported headquarters and primarily provide command, planning, and supervision over their assigned or attached avia-

tion units. In this case, the aviation group becomes the tactical headquarters and functions as such. The brigade headquarters operates from the most forward location from which it can best service its supported and assigned units. The brigade staff coordinates directly with the supported staff in the development of aviation plans. Based upon the recommendations of the brigade commander, the units of the brigade are employed to meet the tactical needs of the supported units. Depending on its assignment, the brigade issues orders, assigns missions, and coordinates with its subordinate elements concerning aviation support.

c. Headquarters Company. Elements of the headquarters company are as follows:

(1) *Company headquarters.* The company headquarters performs command, administrative, and supply functions for the company; provides mess facilities; and controls organizational surface transportation and vehicular maintenance.

(2) *Administration and personnel section.* The administration and personnel section processes all official incoming correspondence, prepares outgoing administrative directives and orders, and recommends assignment of incoming personnel. This section processes awards and decorations, performs information functions, supervises the preparation and maintenance of records, rosters, and reports concerning those personnel matters not assigned to the personnel service company.

(3) *Operations and intelligence section.* The operations and intelligence section may function as one section or as two separate sections. In either case, the two functions are closely coordinated. The operations function includes providing the control and coordination capability required to perform the brigade mission, and to implement operational procedures and directives from higher headquarters in the employment of assigned or attached units. Intelligence functions include providing information to the brigade commander and staff on enemy capabilities, terrain, and weather. The section processes security clearances of indigenous and US civilian personnel employed by US forces.

(4) *Logistics section.* The logistics section advises and assists the brigade commander and staff on maintenance and supply, and provides technical supervision over the maintenance and supply activities of assigned/attached units. The aircraft maintenance officer coordinates with maintenance units to meet current and projected workloads and

makes appropriate recommendations to the brigade commander. Supply actions, not to include those pertaining to aircraft and armament systems, are handled by the company supply officer. The supply officer also monitors the status and availability of required items of all classes of supply.

(5) *Signal section.* The signal section advises the commander on all signal matters pertaining to the brigade, to include capabilities and status of communications. It provides for the operation of the brigade communications equipment and for technical supervision over the avionic maintenance activities of assigned/attached units. The section operates the brigade communications center, develops SOI and SSI, and maintains liaison with higher and adjacent headquarters. It exercises staff supervision of the brigade's avionics activities. In addition, it maintains the status of aviation electronics within the brigade, and monitors the capabilities of maintenance elements to meet current and projected workloads and overall aviation electronic programs scheduled by higher headquarters.

(6) *Aviation section.* The aviation section provides aircraft for command and control, staff visits to dispersed subordinate units, and limited tactical or logistical support.

(7) *Medical section.* The medical section is controlled by the brigade surgeon. Under supervision of the medical administrator, the section maintains necessary records, prepares medical reports and correspondence, and provides technical and administrative assistance to medical elements throughout the brigade.

(8) *Aviation safety section.* Personnel of the aviation safety section develop the brigade aviation safety program, advise the commander and staff on aviation safety matters pertaining to subordinate elements, and recommend measures to minimize aircraft accidents. Duties include surveys of unit airfields and facilities to insure that they meet designated operational and safety requirements.

(9) *Chemical section.* The chemical officer and chemical sergeant are responsible for training brigade personnel in the employment of CBR agents, to include protection of personnel from the effects of these agents when used by friendly or enemy forces. They advise brigade personnel on the use of masks and other precautionary equipment and procedures, and the use of chemical smoke to provide an advantage to friendly forces.



★PART FIVE
 AVIATION COMPANY
 ★CHAPTER 16
 INTRODUCTION

Section I. GENERAL

16-1. Table of Organization and Equipment

The table of organization and equipment (TOE) of each military unit prescribes its normal mission, organizational structure, and personnel and equipment requirements. Users who need detailed information on any specific aviation unit should use the TOE of that unit in conjunction with this manual.

16-2. Mission

A mission is a duty or task assigned to a unit by competent authority. Missions assigned to a unit are usually similar to the normal mission, as stated in the TOE, for which the unit was originally structured.

a. Responsibility. The first responsibility of the company commander is to accomplish the assigned mission. To an incoming commander, mission accomplishment may entail completion of a mission already in progress when command is assumed, or preparing the unit for future assignments.

b. Objective. Missions are assigned to the aviation company with the objective of assisting in accomplishment of the mission of the land force.

c. Authority. When the aviation company is placed in support of a ground unit, the ground unit commander assigns tasks to the aviation commander for execution. The aviation commander retains the authority to issue orders to elements under his command as necessary to accomplish these assigned tasks.

16-3. Supply

The company commander is responsible for all supply activities within his unit. Specific requirements of the company commander are to—

a. Insure that all authorized equipment is on hand or has been requested from the appropriate supply activity.

b. Determine by frequent inspections that all company property is complete and serviceable.

c. Insure that company supply personnel are capable of performing their duties.

d. Insure that all members of the company know how to maintain unit property entrusted to their care.

e. Insure that no unauthorized property is on hand.

f. Initiate appropriate measures to account for company property which has been lost, damaged, or destroyed.

g. Develop unit SOP for the security of all unit property.

16-4. Training

The company commander is responsible for training his unit. Since the TOE provides the minimum number of personnel, by MOS skills, required to perform the unit's normal mission, training must encompass every individual assigned to the company. The objective is to provide a unit capable of performing its normal mission, adjusted as necessary to conform to the current situation. This training normally is conducted in response to requirements from higher command echelons to bring the unit to the required level of operational proficiency and to maintain that level. When the training objective is preparation for a specific combat operation, expected conditions are simulated as nearly as practicable. The company should train with the ground elements that will participate in the operation. Training which requires special emphasis in the aviation company includes the following:

a. Aviator Personnel. The operations officer supervises the training of aviator personnel. This training includes that which is necessary to comply with regulations and directives, to maintain pilot proficiency, to qualify individuals in new types of aircraft when needed, and

to train aviator personnel in the application of prescribed flight procedures.

b. Aircraft Maintenance. The aircraft repair technician and the maintenance supervisor normally assist the maintenance officer in training aircraft maintenance personnel. In addition to training in the maintenance of aircraft currently assigned to the company, consideration must be given to training personnel to maintain new aircraft scheduled for assignment to the company. This training may be augmented by the use of service school or specialist training facilities when available.

c. Operations. The operations sergeant may be designated to conduct training of personnel of the operations section. Duties of these personnel include the preparation of flight plans and manifests, the maintenance of flight logs and individual flight records, and the issue of special equipment required for various flights. Consideration should be given to the requirement for a 24-hour capability, and training should be conducted to produce that capability.

d. Airfield Service. The chief of the airfield service element normally is designated to conduct the training of airfield service personnel. This training covers aircraft fuel handling and the operation of refueling vehicles and equipment. It may include other functions such as the maintenance of airfield lighting devices.

e. Communications. The chief of the communications section may be designated to conduct the training of the company's communications personnel. This training includes instruction and supervised practice in communications procedures, equipment operation and maintenance, and communications security. Field exercises provide opportunities for training in communications functions under varying conditions.

f. CBR and Nuclear Defense Training. Training for defense in these areas normally is conducted as an additional duty by school-trained CBR personnel appointed by the company commander in accordance with AR 220-58.

g. Electronic Warfare Training. Army aviation personnel concerned with the operation and maintenance of communication, navigation, target acquisition, and battlefield surveillance equipment must receive continuous training in defensive measures against hostile signal monitoring activities and electronic jamming and deception. Responsibility for this training is vested in the operations officer. Training should include the following:

- (1) The electronic warfare threat, with emphasis on vulnerability of friendly communication-electronic equipment.

phasis on vulnerability of friendly communication-electronic equipment.

(2) Signal security as it relates to hostile signal intelligence and electronic warfare support measures.

(3) Recognition and reporting of enemy electronic countermeasures (ECM).

(4) Employment of electronic counter-countermeasures, stressing continuity of operation in a hostile ECM environment.

h. Air Defense. All aviation personnel must be trained and motivated in the aggressive use of their individual and crew-served weapons against attacking aircraft.

i. References. Army regulations which may be useful to the aviation company commander in conducting the unit training program include the following:

(1) AR 71-7, Military Training Aids and Army Training Aid Center System.

(2) AR 310-1, Military Publications—General Policies.

(3) AR 350-1, Army Training.

16-5. Inspections

a. General. Inspections are the means by which commanders determine the state of operational readiness of personnel and equipment assigned to a unit. They provide the company commander with definite indications of deficiencies requiring corrective action. Subsequent inspections indicate the degree to which corrective action has been taken, and reveal other deficiencies which may have developed. AR 750-1, 750-5, and 750-8 contain guidance on the conduct of inspections.

b. Inspections by the Company Commander. The company commander inspects the company as often as necessary to insure that the unit is capable of performing its mission. Each inspection is conducted for a specific purpose. Inspections may be formal or informal:

(1) *Formal.* The formal command inspection involves advance notice and a set procedure. It normally applies to all aspects of the unit including personnel, aircraft, and other materiel. It usually is preceded by written instructions to the platoons or other elements to be inspected. These instructions indicate who will conduct the inspection, the specific manner and location in which materiel is to be displayed, and the time and place of preliminary conferences. Although the company commander personally participates, he may employ an inspecting party to assist him. The party usually includes principal members of the unit

and necessary technical personnel. The specific composition of the party depends on the type and extent of the inspection to be conducted.

(2) *Informal.* The company commander conducts such informal inspections of the unit as he considers necessary. An informal inspection may be conducted at any opportune time or place, and usually is performed without prior notice. As the inspected element has no opportunity for preparation, this inspection provides the commander with information on actual day-to-day operations. It follows no set procedure except as prescribed by the commander, but is conducted with full attention to detail. It is one of the commander's most effective methods of evaluating the company.

c. Inspections by the Battalion Commander. The company is subject to periodic inspection by higher headquarters, normally the battalion commander. These inspections may be formal or informal, scheduled or unscheduled, and are conducted in much the same manner and for the same purpose as inspections conducted by the company commander. Primary emphasis is placed on those aspects which affect accomplishment of the battalion mission, and on areas in which deficiencies are known or suspected to exist.

16-6. Aviation Safety

a. The company commander designates an individual to assume the additional duty of aviation safety officer for the company. This officer assists the commander in all matters pertaining to aviation safety, to include coordination with the battalion aviation safety officer.

b. The company aviation safety officer initiates the commander's aviation safety training

program, placing particular emphasis on the training of personnel concerned with aircraft maintenance, airfield control, airfield service, crash rescue, and actual aircraft operations. The objective of this training is to reduce and keep to a minimum accidental manpower and materiel losses, thus providing more efficient utilization of resources and advancing the combat effectiveness of the Army.

c. The company commander, assisted by the company aviation safety officer, prepares the company's preaccident plan to provide immediate assistance to personnel injured in aircraft accidents and to otherwise minimize the effects of such accidents. The preaccident plan lists the procedures which are to be followed after an aircraft accident—

- (1) Rescue of personnel.
- (2) Extinguishing fires and neutralizing spilled fuels which may constitute hazards.
- (3) Guarding the wreckage.
- (4) Organizing an investigation and determining the specialists needed to assist in the investigation.
- (5) Investigation and analysis to determine causal factors.
- (6) Consideration of causal factors and evaluation of the findings.
- (7) Preparation of the accident report.
- (8) Determination of actions to be taken to prevent future accidents.

d. Aircraft accidents occurring in an element of an aviation battalion are investigated by a battalion aircraft accident investigation board. Guidance for appointment of the board is set forth in AR 385-40. The battalion SOP should prescribe the aircraft accident investigation procedures to be followed by an aviation company operating as a separate unit.

Section II. COMBAT SERVICE SUPPORT

16-7. General

The aviation company possesses a limited capability to provide some of its own combat service support services. To meet requirements for services not organic to the unit, organic capacity is insufficient, the company must request support through appropriate channels. An example of the need for prompt supply support is the fact that a typical assault helicopter company maintains only a three day supply of aviation POL. This means that POL must be available for company pickup, or distributed to the company, on a daily basis. This section discusses aircraft maintenance,

repair parts supply, POL, and ammunition supply as directly related to the aviation company.

16-8. Aircraft Maintenance

a. General. The aviation company's capability to perform aircraft operations on a sustained basis is totally dependent upon efficient aircraft maintenance, both as to planning and execution. Maintenance of company aircraft begins with maintenance performed by company personnel and extends through direct support (DS) and general support (GS) to depot maintenance, categorized as follows:

(1) *Organizational.* Organizational aircraft maintenance is performed by personnel of the aviation unit at the crew chief level. This maintenance includes the inspection, servicing, lubrication, and adjustment of aircraft components. The replacement of parts and minor assemblies within their capability is an important function of this category of maintenance.

(2) *Direct support.* Aviation units possessing an integrated DS capability can perform this maintenance for their own aircraft. Units not possessing this capability are dependent upon support elements for DS services. The major function of DS maintenance is the repair of end items or unserviceable assemblies for return to the using unit. Direct support elements can also install in unit aircraft those components whose installation exceeds the capability or capacity of an aviation unit's organizational maintenance elements.

(3) *General support.* The major function of GS aircraft maintenance is the repair or overhaul of major components of large end items. Company aircraft requiring maintenance at the GS level normally are moved to the GS facility. Where available, float aircraft may be provided to the aviation company by the GS element to replace aircraft left at the GS facility for repair.

(4) *Depot.* Depot maintenance consists of major maintenance that is beyond the responsibility of the above categories. The depot maintenance facility that provides backup support for aircraft of the aviation company may be located in CONUS, aboard ship, in COMMZ, or in a relatively secure area.

b. Aircraft Maintenance Support Elements. Aircraft maintenance support exceeding capabilities organic to the aviation company is provided as follows:

(1) Divisional aircraft receive DS maintenance, to include DS maintenance on avionics equipment and aircraft maintenance systems, from their organic transportation aircraft maintenance company, which is located in the maintenance battalion of the DISCOM. In the airmobile division, the DISCOM transportation aircraft maintenance and supply battalion provides aircraft DS maintenance to include avionics and armament maintenance, and repair parts.

(2) Nondivisional aircraft in the corps areas receive DS maintenance from the transportation aircraft direct support company located in the corps support brigade (FASCOM). General support maintenance is provided by

the transportation aircraft maintenance general support company, also located in the corps support brigade.

(3) Aviation units in the army rear area receive DS maintenance from the transportation aircraft direct support companies located in the army rear support brigade. General support aircraft maintenance for aviation units located in the army rear is provided by the transportation aircraft maintenance general support companies of the army rear support brigade.

(4) In addition to the support listed above, the transportation aircraft maintenance general support companies, located in the army rear support brigade, provide general support aircraft maintenance support to divisional units of the field army and backup general support aircraft maintenance to units in the corps area.

16-9. Aviation Fuel Supply

Bulk petroleum products, to include aviation fuel (class IIIA), are moved as far forward as practicable by pipeline. Where pipeline is extensively used, wholesale distribution points are established at appropriate points along the pipeline and at terminal points. Distribution is made as follows:

a. In the COMMZ, the petroleum operating companies deliver bulk petroleum products to DS supply and service battalions for issue to consumer units. Consumer units use their organic vehicles to transport fuel to unit areas. Where unit vehicles are not capable of performing this function, assistance is requested from the DS supply and service battalion servicing the nearest issue point.

b. In the field army, the support brigade petroleum supply battalions deliver bulk products to DS supply and service battalions for issue to consumer units located in the field army service area and in the corps areas. Aviation company organic vehicles are used to move fuel from supply points to company areas. DISCOM's receive bulk fuel through this same support brigade channel for distribution to the divisions.

c. Divisional aviation companies normally pick up their fuel from supply points established in the division area by DISCOM elements. In the airmobile division, unit distribution to units in forward areas is provided to the extent practicable. Basic doctrine for the forward area refueling of aircraft is stated in paragraph 2-12.

16-10. Ammunition Supply

a. The requirement for ammunition supply varies greatly between aviation companies, depending upon the TOE mission of the unit. For instance, a company containing attack helicopters would normally have a much greater requirement for ammunition (class VA) supply than a company containing observation aircraft only. Both companies would require ammunition for individual and crew-served weapons.

b. Supply point distribution is the normal method of providing ammunition to using units. The company prepares the ammunition request (transportation order) for the required amounts and types of ammunition, has the request validated by the appropriate ammunition officer, and picks up the ammunition at the nearest Army ammunition supply point having the requested ammunition. This method

is used by all aviation companies except those assigned to the airborne or airmobile divisions whose DISCOM elements normally provide unit distribution directly to the company.

c. Ammunition supply depots are located in the forward and rear areas of the COMMZ, with a minimum of one forward and one rear ammunition depot per corps. These depots support ammunition supply points in the combat zone and using units located in their areas of responsibility in the COMMZ.

d. Direct support army ammunition supply points are positioned forward in the corps area near the division rear boundary. Aviation companies in corps and division areas (except in airborne and airmobile divisions) draw ammunition from these points. Aviation units located in corps rear areas may more expeditiously draw their ammunition from a general support army ammunition supply point established in their vicinity.

Section III. SIGNAL COMMUNICATIONS

16-11. General

Signal communication is the means by which the aviation company commander exercises command and control over his unit. It includes all means of conveying information such as radio, wire, messenger, and visual and sound signals, except by personal conversation or mail. This chapter discusses communications directly affecting the aviation company. Chapter 4, FM 100-10 contains detailed information on theater army signal communications.

16-12. Responsibilities

The company commander is responsible for installing, operating, and maintaining the organic communication facilities of his unit, and for insuring that these facilities are integrated with those of higher headquarters or with a supported unit's signal system. Each commander is responsible for and exercises tactical and technical control over the communication systems within his unit. Tactical control insures that the systems are established and maintained to meet the requirements of the tactical situation. Technical control includes the supervision of the methods of installation, operation, maintenance, and supply of the signal equipment employed. The commander is also responsible for the development and implementation of communication security policies and procedures. The aviation company communication system provides parallel

means of communications for efficient command, control, and administration of the unit. The system provides the commander with the capability to control the actions of his elements, to coordinate his operational activities, to receive and transmit orders and information, to maintain contact with higher headquarters and with other elements concerned with aerial operations, and to coordinate logistics and personnel matters.

16-13. Means of Signal Communication

a. *General.* The means of signal communication available to the aviation company are wire, radio, messenger, visual, and sound. Communications equipment is authorized in sufficient quantities to permit the unit to accomplish its normal TOE mission. Factors which determine the communications means to be provided are type vehicles, mission, equipment types, and personnel requirements. The various means have different capabilities and limitations. They are used so that they supplement each other, and complete dependence is not placed on any one means. The reliability of a communications system is greatly increased by the use of all available means. The communications means to be employed are those that provide speed, reliability, security, and flexibility to meet the operational requirements.

b. Wire Communication.

(1) Wire is the principal means of communication down to and within the operating elements of the company. It includes the use of field wire, wire-laying and recovery equipment, battery operated telephones, switchboards, teletypewriters, voice and data security equipment, and associated equipment. Except for the transmission of maps and documents, wire communication is highly effective. It affords person-to-person conversation with break-in operation (capability of interrupting the conversation) and is more secure than radio communication. However, security is never assured when transmitting on wire in the clear. The decision to establish wire communication depends upon the need for it and the available time to install and use it. The supply of wire on hand, the expected resupply, and future needs also are considered. Wire communication can be used in most terrain situations. Tables of organization and equipment provide available companies with the equipment to install and maintain their wire communication systems.

(2) Switchboards are used to increase the flexibility of wire systems and to reduce the number of lines needed. Party lines may be used to expand the subscriber capacity.

(3) The number of telephone messages that can be transmitted simultaneously over a wire system is limited. For this reason, calls are kept brief; the telephone is reserved for occasions when there is a need for discussion, speed, and relative secrecy. During critical periods, the telephone may be restricted to designated personnel, except for emergency calls. Telephones are not used for long reports or orders when other means can be used more effectively. To reduce the length of telephone conversations and facilitate keeping records of conversations, messages should be written or notes prepared ahead of time.

(4) Teletypewriter service is established within the aviation company for certain express purposes. It is used primarily for air traffic control and meteorological information. The volume and nature of this information is such that written form (hard copy) is required for dissemination to the multiple users in an aviation company.

c. Radio Communication.

(1) Voice radio is another means of communication available to the aviation company. It is the primary means of communication between aircraft, with the aviation company, for air traffic control, and with supported units.

Within the basic structure of the aviation company, the commander, platoon leaders, and, in certain units, some section leaders are provided vehicular-mounted radios. All aircraft are provided radios. Additional radios are provided for essential functional elements of the company, such as the operations section. All sets, except some non-communications types in aircraft, are capable of voice operation. This affords person-to-person communication between ground stations and aircraft. Radio communication is less vulnerable to enemy fire than wire, but it is susceptible to electronic jamming and deception as well as to interference from static and other radio stations. The susceptibility of radio to electronic countermeasures is significantly increased in air-to-ground communications due to greater line-of-sight and corresponding effective transmission range. Its reliability depends upon the skill of the operators and the maintenance performed on the equipment. Security requirements may restrict its use in certain operations, and the need for encoding messages when off-line encryption devices are used causes delay. The principal advantage of radio is the speed at which communications can be established. Vehicular and aircraft radios may be made operational in a matter of seconds. Radio is also a flexible means of communication. It provides communication across terrain over which wire may be impractical to install. Too frequently, however, radio communications are employed for the transmission of information when the more secure wire communications are available.

(2) Radio equipment in the aviation company includes the vehicular sets specified in the TOE and those provided in aircraft. Since the vehicular sets are normally operated from vehicular power sources, their use is limited to situations in which the vehicle is utilized. Exceptions are made when vehicular radio stations are employed as net control stations, or when they are required to operate continuously in a radio net at which time auxiliary off-vehicular power units are provided. Remote control equipment can be used to permit operation of VHF-FM radios up to 3 kilometers from the radio set. This allows the radio and vehicle to be placed on terrain favorable for communications while permitting the operator to be located where he can best serve the requirements of the company element he supports.

(3) The tactical use of radio depends upon the characteristics of the sets employed. To be

capable of operating together, radio sets must have a common or overlapping frequency range, emit the same type signal, be located within the operating range of the lowest powered set in the net, and have the same type modulation. The operating range given in technical manuals pertaining to an individual radio set is for average conditions; the range obtained may vary depending on the operator's skill, weather, terrain, interference, use of proper antennas, location of the set, and its condition. Power lines and steel structures located near operating sites reduce operating ranges. The greatest ranges are obtained between sites affording line-of-sight operation. Army aircraft are often required to extend this line-of-sight range by aerial radio retransmission, or radio relay.

(4) Radio is the least secure means of communication. It must be assumed that interception takes place every time a transmitter is placed in operation; therefore, communications security should be a constant consideration when using radios. Communications with aircraft are unmistakable to an enemy because of the characteristics of these transmissions. The use of radios may therefore be restricted or prohibited for security reasons. The decision to silence radios or to send messages in the clear is made after all factors have been carefully considered. For example, radios are not silenced when the need for radio communication outweighs the value of the information that the enemy might gain.

(5) Since only one station can transmit at a time, the message-handling capacity of a radio net is limited. The time required for a message transmission to its addressee is primarily dependent on whether it is encrypted or sent in clear text and on the volume of traffic of similar or higher precedence awaiting transmission. The speed and message-handling capacity of a radio net is increased by training all of the using personnel in message writing. Messages that are written before transmission can be sent more efficiently.

(6) There are other nets which aviation companies are frequently required to enter. Aircraft of the companies are provided equipment which enables them to enter almost any of the FM nets employed by elements of the army in the field. In most areas of the world, aircraft must also operate in nets specifically designed for air traffic control purposes. These nets are established by the command having airspace jurisdiction. These may be under the

jurisdiction of a civil agency with its own established procedures for operation.

d. Messenger Communication.

(1) Messenger, the most secure means of communication, is flexible and reliable. But messenger service has some limitations in that it is vulnerable to enemy action in forward areas and does not permit conversation between the originator and the addressee. It is the only means available within the unit for transmitting messages such as maps and documents. Messengers are used when security is required and when the time of delivery by messenger is less than that required for message preparation and transmission by other means. Messengers are the best means for transmitting long messages over short distances. They may travel by foot, motor vehicle, or aircraft. The efficiency of messenger service is improved by the proper selection and training of messengers.

(2) Aviation companies will have occasion to employ messengers to deliver such materiel as film from photographic sensors, maps on which pilots/observers have made notations of observations, and other data accumulated in the conduct of aerial missions. In addition, aviation companies may be called upon to establish an aerial messenger service in support of some element of the command.

e. Visual Communication.

(1) Visual signals (FM 21-60) provide a supplementary means of communication. Visual signals are transmitted by flags, lights, pyrotechnics, panels, arm-and-hand signals, and other prearranged visual means. They are suitable for transmitting prearranged messages rapidly over short distances when their use is not prohibited for security reasons. The enemy may use similar signals for deception and confusion. Visual signals are easily misunderstood. They cannot be used during poor visibility or when line-of-sight locations are not available.

(2) Signal lights, either improvised or issue, may be used to send prearranged messages. The meanings are given in the SOI or prescribed by the commander. Typical and most familiar to aviators and air traffic control personnel, is the hand-held signal light which can provide a highly directional light in the colors of red, green, or white, and which is used to control the movement of aircraft in visual conditions at airfields when the use of radio is prohibited and use of the light gun is authorized. Messages may be transmitted by lights, using the Morse code; using the issue

equipment, the greatest speed of transmission is about five words a minute.

(3) Pyrotechnics, including smoke, are issued in various colors and types. The meanings of certain pyrotechnics are given in the SOI. Signals are included for identifying units as friendly, calling for fire, marking targets, and for reporting an objective reached. Transmission and reception of pyrotechnic signals are preplanned. Pyrotechnics can be used for communication between ground units and aircraft, and for ship to shore communication.

(4) Two general types of panels are issued for communication with friendly aircraft. One type is the marking and identification panel, which is made in bright fluorescent colors. The other type uses black panels and white panels, which are used on light and dark backgrounds, respectively. The marking and identification panels can be used to mark positions or identify friendly units. The black and white panels can be used to transmit brief messages. This is done by using the combined panel system and panel recognition code, which is included in the SOI.

(5) Aircraft maneuvers, such as rocking of wings, or rapid changes in engine speed, can be used for limited air-to-ground communication. Prearranged signals from aircraft to ground units, used primarily for emergencies or aircraft identification to radar operators, should be included in the SOI.

f. Sound Communication. Sound is a supplementary means of communication and is available to all units. Sound signals are transmitted by voice, whistles, and other noisemaking devices. They are used chiefly to attract attention, transmit prearranged messages, and spread alarms when their use is not prohibited for security reasons. Sound codes are kept simple to prevent misunderstanding. The range and reliability are greatly reduced by noise of battle or aircraft engines. Sound signals and their meanings are prescribed in the SOI or are assigned by commanders.

16-14. Communications Security

a. General. Communications security (COMSEC) is the safeguarding of messages and communications equipment from the enemy and unauthorized persons. It includes all measures authorized by the US Army to counteract enemy communications intelligence activities. Communications security is a command responsibility. It requires conscientious participation by all individuals concerned with communication activities. The unique charac-

teristics of Army aviation communications, especially radio, make them highly vulnerable to enemy intercept and traffic analysis. With the exception of physically secured wire circuits, all communications are subject to such enemy exploitation.

b. Physical Security. Physical security is the safeguarding of classified equipment, materials, and areas from unauthorized access. All classified communications equipment and materials must be used, stored, transferred, and transported in accordance with current security regulations.

c. Transmission Security. Transmission security consists of measures to prevent the enemy from exploiting electrical communications transmissions. Transmission security is improved by the following measures:

- (1) Reduction of the number and length of transmissions to a minimum.
- (2) Reduction of transmission power.
- (3) Strict adherence to authorized transmission procedures.
- (4) Circuit discipline and operator training.
- (5) Defense against jamming and imitative deception.
- (6) Defense against interception and direction finding.
- (7) Defense against traffic analysis.
- (8) Authentication of all messages.

16-15. Communication Orders and Instructions

a. General. The signal or communications officer is responsible to his commander for technical coordination and control of all communications employed by assigned and attached elements of the command. He discharges this responsibility through instructions that he develops for inclusion in combat orders. Signal communication instructions that are primarily technical in nature are published in signal operating instructions (SOI) and standing signal instructions (SSI).

b. SOI. The SOI is a series of orders issued for technical control and coordination of the signal communication activities of a command. Each series usually remains in effect for a short period of time and is then superseded by a new edition.

(1) *Purpose.* An SOI contains technical instructions, subject to frequent change, that are required in the employment of signal communications. Since the instructions apply to communications systems throughout the division or separate brigade, they aid in combining

the systems into an integrated signal communication network. The SOI includes related miscellaneous information, such as official time designations and data on moon phases and sunrise and sunset. When the SSI is not published, instructions which are ordinarily published in the SSI will be included in the SOI. In a division or separate brigade, instructions published in the SOI are prepared in such detail that it is unnecessary for subordinate commanders to prepare SOI for their use. When required, extracts of the SOI are prepared by the organization that needs them.

(2) *Security.* Each portion of the SOI is classified according to its content, as prescribed by AR 380-5. The assembled SOI is assigned the same classification as its most highly classified item. Each copy of the SOI is assigned a copy number to facilitate distribution and control, but the SOI is not designated as a registered document. Since SOI contain information of particular value to the enemy, a complete SOI should not be taken forward of the command post (aviation company operations). When an SOI or an extracted portion is compromised, the fact must be reported and the SOI replaced immediately. Preparation of a complete replacement SOI is a complicated and time-consuming process; a replacement SOI and the procedures for replacement should be established in advance.

(3) *Content.* The SOI normally contains the following, each of which is provided a separate identifying number:

- (a) Preface.
- (b) General information.
- (c) References to orders and regulations.
- (d) Authentication systems.
- (e) Panel code and recognition signals.
- (f) Codes: operations and brevity codes.
- (g) Radio call signs and frequencies.
- (h) Telephone directory.
- (i) Pyrotechnic and smoke signals.
- (j) Vehicular identification markings.
- (k) Sun and moon data.
- (l) Visual and sonic signals.

c. *SSI.* The SSI contains instructions necessary for the operation of signal communications equipment, agencies, and means. Instructions for the use of data in the SOI are contained in the SSI. The SSI is similar to the SOI in format. Item base numbers and subjects are the same in the SSI as for corresponding items in the SOI.

(1) *Purpose.* An SSI contains technical instructions, not subject to frequent change,

that are required in the employment of signal communications throughout the issuing command. It includes instructions that explain the various procedures to be followed when using the individual items of the SOI. The SSI also includes standing instructions on radio net operation, authentication procedures, and actions to be taken in the event of enemy jamming or deception. When an SSI is not published, these instructions are incorporated in the SOI. SSI items receive the same distribution as SOI items.

(2) *Security.* Due to the security classification of the items in the SOI, items with the same base number listed in the SSI will have the same security classification.

16-16. Communications Personnel

To aid the commander of the aviation company in the performance of his communication responsibilities, a number of communication specialists are provided. In some instances, these personnel are assigned to a single element of the company, and in others, they are scattered among the various elements of the company. In general, the following provides an indication of the functions of the communications personnel of the unit:

a. *Communications Officer.* The function of the communications officer within an aviation company is normally assigned as an additional duty to one of the officers of the command. The communications officer is responsible to his commander for the technical coordination and control of all signal support activities provided by the communications personnel of the unit and others employing the communications equipment and systems of the command. His responsibilities include the following:

(1) *Reconnaissance.* Recommends location of command post and major elements of the command.

(2) *Plans.* Plans the communication system of the unit with attached and supporting units; also plans displacement.

(3) *Direction and supervision.* Directs and supervises the installation, operation, and maintenance of the communication equipment of the unit.

(4) *Advisor to commander.* Advises the commander on pertinent electrical countermeasures and anti-jamming techniques.

(5) *Administration.* Prepares communication SOP, and communication portion of orders, prepares reports to higher headquarters, and advises the S4 on supply matters pertaining to communication equipment.

(6) *Liaison.* Contacts communication officers of senior, subordinate, reinforced, and adjacent units to coordinate and improve communications.

(7) *Training.* Plans and supervises all communication training in the unit.

(8) *Inspections.* Conducts technical inspections of communication equipment.

b. Communications Chief. The aviation company communications chief is the NCOIC of the communication functions of the company. As such, he is the principal enlisted assistant to the communications officers. His duties include:

(1) Supervising and coordinating the work of the communication personnel of the company.

(2) Making recommendations for the location of communication facilities of the company and supervising their emplacement.

(3) Monitoring the use of communications by the company and bringing to the attention of the communications officer violations of communications procedure, security, or other established directives or orders.

(4) Insuring that records are properly maintained on communications equipment items and their operation.

(5) Keeping the communications officer informed as to the status of maintenance of company communications equipment and the company's supply of repair parts.

(6) Assisting in the conduct of instruction and in the training of the unit's communications personnel, to include EW measures and countermeasures.

(7) Keeping himself informed on all communications aspects of the unit.

(8) Being prepared to assume all duties of the communications officer, if this should become necessary.

★CHAPTER 17

COMPANY ELEMENTS

17-1. GENERAL

Organizational elements of the various aviation companies are generally similar in structure and function, particularly as to command and support elements. Primary differences between company structures are found in the operational elements that actually perform the missions assigned to the company. Airlift of troops is the major function of the type company discussed in this chapter. In a company structured to perform aerial surveillance, for instance, the lift and escort platoons discussed below could be replaced with aerial radar and aerial infrared platoons. Allowing for differences such as these, the characteristics of elements of the type company discussed in this chapter can be generally applied to most companies that perform their missions primarily by use of aircraft.

17-2. Company Headquarters

a. Composition. The company headquarters (HQ) includes the company commander, executive officer, first sergeant, mess steward, maintenance supervisor, supply sergeant, and sufficient personnel to perform the administrative, supply, mess, and motor maintenance functions of the company.

b. Functions. Responsibilities of the company HQ include—

- (1) Training and operation of the company.
- (2) Company administration.
- (3) Requisition and distribution of supplies.
- (4) Operation of the company mess.

17-3. Operations Element

a. Composition. The operations element includes the operations officer, assistant operations officer, flight operations chief, and sufficient flight operations and communications personnel to provide 24-hour per day operation.

b. Functions. Functions of the operations element include the following:

- (1) Establishes and operates the company airfield.
- (2) Assigns flight missions to company elements.
- (3) Coordinates flight planning with the element responsible for air traffic regulation in the area of operations.
- (4) Coordinates flight schedules to insure availability of aircrews and aircraft.
- (5) Maintains individual flight records.
- (6) Assists the commander in conducting the flying safety program.
- (7) Supervises the maintenance of flight crew proficiency and qualification.
- (8) Conducts liaison with higher headquarters and with other units as required for planning and scheduling purposes.
- (9) Maintains a current file of aeronautical charts and flying regulations.
- (10) Maintains the intelligence situation map and locations of friendly bases, outposts, and defended villages in internal defense and development operations.
- (11) Assists in planning and preparing orders for combat operations, to include airborne operations.

17-4. Airlift Platoon

a. Composition. Personnel of the airlift platoon HQ include the platoon commander, platoon sergeant, and a rotary wing instrument flight examiner who administers instrument flight and written examinations for aviators assigned to the platoon. The platoon contains two airlift sections, each of which is led by a section commander having sufficient rotary wing pilots, crewchiefs, and door gunners to operate assigned aircraft.

b. Functions. The airlift platoons are the company elements most directly concerned with accomplishment of the company mission, which is to provide tactical air movement of troops, supplies, and equipment within the

combat zone. Although the other company elements provide services and support without which the airlift platoons could not function on a sustained basis, the airlift platoons provide the personnel and aircraft that actually perform the tactical air movement mission of the unit.

17-5. Attack Helicopter Platoon

a. Composition. The attack helicopter platoon HQ consists of the platoon commander, platoon sergeant, and a light vehicle driver. Each of the two sections includes a section commander, who is an aviator, and sufficient rotary wing pilots, crewchiefs, and door gunners to man assigned aircraft.

b. Functions. The primary function of the attack helicopter platoon is to furnish personnel and aircraft to provide armed aerial escort to helicopters of the airlift platoons transporting personnel and materiel in the combat zone. The escort function includes the neutralization of enemy forces known or believed to be operating along routes or near landing zones used by the airlift aircraft. As a secondary function, the platoon provides combat support to the land force commander.

17-6. Service Platoon

The service platoon consists of the following elements:

a. Service Platoon HQ. Personnel of the service platoon HQ include the platoon commander, platoon sergeant, and necessary personnel to provide quantity and quality control for organizational and direct support maintenance of aircraft assigned to the company. The platoon commander, who is a qualified aircraft maintenance officer, is responsible for accomplishment of the aircraft maintenance and services performed by the functionalized sections of the platoon. Helicopter technical in-

spectors assigned to this HQ conduct inspections of organizational/direct support aircraft maintenance performed on assigned aircraft. Repair parts specialists of this HQ receive, store, and issue aircraft repair parts needed for organizational/direct support aircraft maintenance, and process recoverable items for turn in to the appropriate general support unit.

b. Aircraft Systems Repair Section. The aircraft systems repair section, when assigned, contains the aircraft repair technician, maintenance supervisor, and sufficient personnel and equipment to provide the company with a direct support aircraft maintenance capability.

c. Aircraft Maintenance Section. The aircraft maintenance section contains an aircraft repair technician, maintenance supervisor, and sufficient personnel and equipment to provide the company with an organizational aircraft maintenance capability.

d. Aircraft Armament Section. The aircraft armament section provides an the company with an organizational maintenance capability for weapons systems and ammunition used by company aircraft. Personnel of the section include the armament repair technician, aircraft armament sergeant, and sufficient personnel to accomplish assigned tasks.

e. Avionics Repair Section. Personnel of the avionics repair section perform organizational and direct support maintenance on avionics equipment used in aircraft assigned to the company.

f. Airfield Service Section. Under supervision of the section chief, personnel of the airfield service section provide aircraft services to include crash rescue, refueling, lighting for helicopter sites, parking and mooring, and general helicopter service. When no armament section is authorized, this section is responsible for rearming unit aircraft.

★CHAPTER 18

ARMY AVIATION COMPANY ORGANIZATIONS

18-1. GENERAL

a. This chapter contains a discussion of the functions of a selected group of Army aviation companies that perform their missions primarily by use of aircraft. TOE numbers are shown for specific units.

b. Throughout the chapter, the capabilities of specific Army aviation units are given. These capabilities are based on operations under conditions permitting optimum utilization of personnel and aircraft. The capability of an aviation unit can be accurately estimated only by application of the unit's basic capabilities to the actual or expected conditions for an operation. Variable factors such as density altitude, wind velocity, terrain, and aircraft condition must be considered. The aviation unit commander is the individual responsible for applying these variable factors to his unit and advising the ground commander as to the actual capability of the aviation unit under current conditions.

18-2. Reconnaissance Airplane Company, TOE 1-7

a. *Mission.* The normal mission of the reconnaissance airplane company is to provide combat elements with area reconnaissance, surveillance, and target acquisition capabilities through visual observation and limited photographic means. In addition, it provides limited light aviation support to units which it supports.

b. *Assignment.* The company is assigned to corps, field army, or separate task force as required.

c. *Capabilities.* This unit can provide

(1) Day and night operations during visual flight conditions.

(2) Aerial observation by visual and limited photographic means for locating, verifying and evaluating targets, conducting terrain studies and providing fire adjustment.

(3) Aircraft for aerial command post, liaison, and radio retransmission.

(4) Limited battlefield illumination for combat elements.

(5) Limited weather reconnaissance and advisories.

(6) Aerial radiological survey.

(7) Delivery of psychological operations leaflets.

d. *Organization.* The reconnaissance airplane company consists of a company headquarters, flight operations section, communications section, four flight platoons, and a service platoon.

(1) *Company headquarters.* The company headquarters provides administrative, mess, and supply functions.

(2) *Flight operations section.* The flight operations section contains sufficient personnel to provide operations on a 24-hour basis. The section also provides intelligence briefings and debriefings and disseminates intelligence information to U.S. and allied military forces. Also included in its functions are communications planning, establishing and maintaining unit wire and radio nets, and preparing authorized codes.

(3) *Communications section.* The communications section performs maintenance on avionics and photographic equipment, and trains aviators and observers in the proper methods of storing, loading, unloading, and operating the aircraft camera system.

(4) *Flight platoons (4).* Each platoon is organized with a platoon headquarters and three flight sections. This platoon contains the aircraft required to conduct its specialized missions.

(5) *Service platoon.* The service platoon consists of a platoon headquarters, an aircraft maintenance section, and an airfield service section. The platoon is the center for maintenance and support activities of the unit. It provides organizational aircraft and vehicle maintenance, crash rescue, and refueling and fuel storage support.

e. *Concept of Employment.* The reconnais-

sance airplane company will normally be attached to a nondivisional battalion in the corps area to provide area surveillance/reconnaissance capability for a corps force. It is a semi-independent unit, capable of day and night surveillance of the supported area during VFR weather conditions. The company depends upon the unit to which attached for administrative and logistical support. Composition and employment of the company will vary with specific mission requirements. The basic unit is the flight section consisting of two O-1E aircraft. Normally, one flight platoon will support a division attached to the corps force. The company organization provides functionalized sections for efficiency and flexibility of command and employment. When required, a platoon or several sections may be detached from the company for short periods to operate independently.

18-3. Aviation Company, Separate Infantry Brigade, TOE 1-47

a. Mission. The normal mission of the aviation company, separate infantry brigade, is to provide aviation support for the brigade headquarters, brigade support battalion, and other brigade units which do not have organic aircraft. In addition, it provides general support and reinforcement to units which have organic aircraft.

b. Assignment. The company is assigned to the separate infantry brigade, TOE 7-100.

c. Capabilities. This unit can provide—

(1) Aviation special staff personnel for the brigade headquarters.

(2) Aircraft to support the brigade headquarters, brigade support battalion, and other units without organic aircraft.

(3) Aircraft for general support and reinforcement to units with organic aircraft.

(4) A central aircraft communication and control facility.

(5) Participation in airmobile combat operations. (One reinforced dismounted infantry platoon can be airlifted in one airlift using organic aircraft.)

(6) Operation of one VFR airfield with terminal flight facilities.

(7) Operation of forward landing sites.

(8) Augmentation of aeromedical evacuation.

(9) Aerial delivery of psychological operations leaflets and loudspeaker broadcasts.

d. Organization. The aviation company, separate infantry brigade, consists of a company

headquarters, a general support platoon, an aeroscout platoon, and a service platoon.

(1) *Company headquarters.* The company headquarters accomplishes, administration, mess, and supply.

(2) *General support platoon.* The general support platoon consists of a platoon headquarters, an airlift section, and a tactical support section.

(3) *Aeroscout platoon.* The aeroscout platoon consists of a platoon headquarters, two aeroscout sections (light), and an aeroscout section (heavy).

(4) *Service platoon.* The service platoon consists of a platoon headquarters, an aircraft maintenance section, an electronics maintenance section, and an airfield service section.

e. Concept of Employment.

(1) The organic aircraft of the brigade aviation company will be employed in those aviation tasks which the brigade commander considers of greatest importance to the successful accomplishment of his mission. Operational missions for the company are assigned by the brigade S3 through the flight operations element of the company headquarters. Missions are based on priorities and guidance established by the brigade commander. As a matter of priority, the tactical support section is employed primarily for command and control, while the airlift section is used for the movement of troops and supplies in airmobile operations. The aeroscout platoon is employed to augment the reconnaissance and security capability of the brigade armored cavalry troop.

(2) The brigade aviation company is capable of providing support to all units of the brigade. Aviation support beyond the capabilities of this company, especially for airmobile operations, must be requested from the next higher headquarters. The unit provides its own organizational maintenance and receives direct support maintenance from the support battalion.

18-4. Assault Helicopter Company, Combat Aviation Battalion, Airborne Division, TOE 7-67

a. Mission. The normal mission of the assault helicopter company is to provide tactical air movement of combat troops, supplies, and equipment in airmobile operations.

b. Assignment. The company is assigned to the combat aviation battalion, airborne division, TOE 7-65.

c. Capabilities. This unit can provide—

(1) Near continuous, day and night, operations during visual weather conditions and limited operations under instrument weather conditions.

(2) In a single lift, airlift for the assault elements of one airborne rifle company.

(3) Air movement of troops, supplies, and equipment within the division area.

(4) Augmentation of aeromedical evacuation.

d. Organization. The assault helicopter company consists of the company headquarters, three airlift platoons, and a service platoon.

(1) *Company headquarters.* The company headquarters performs the administrative, mess, and supply functions. The company headquarters normally will be established in an area which is centrally located in relation to the airlift platoons, with distance depending on terrain and probability of nuclear attack. A company heliport will be established for use by the command post group and the service platoon.

(2) *Airlift platoons (3).* Each of the three airlift platoons consists of a platoon headquarters and two airlift sections of four helicopters each. These platoons provide the personnel and equipment necessary to operate the helicopters and perform a portion of their organizational maintenance. The airlift platoons provide tactical air movement of troops and materiel; a means of vertical infiltration for behind-the-lines raiding parties, special forces personnel and patrols, and for recovering them on short notice from small predesignated areas; support and reinforcement missions as directed; and facilities for movement of engineer or chemical teams and munitions.

(3) *Service platoon.* The service platoon consists of a platoon headquarters, aircraft maintenance section, communication maintenance section, and an airfield service section. It provides organizational maintenance services for the airmobile company's helicopters, vehicles, small arms, and communications equipment.

e. Concept of Employment.

(1) The assault helicopter company is most effective when used as a unit, but it can be fragmented if necessary. With assistance from its parent or supported unit, a platoon or section can operate detached from its parent unit for an extended period. The efforts of the other sections in the company are directed toward support of the airlift platoons. The company operates from its own dispersal or assem-

bly area in the division rear area within the perimeter of one of the tactical units of the division reserve. It is habitually employed in support of the division in forward areas of the combat zone. Prepared landing areas are not required for its operations.

(2) The planning and coordination necessary for the support of a unit will vary according to the mission of the supported unit. The assault helicopter company commander can best maintain his unit in a state of readiness through close and continuous coordination with the division aviation battalion commander. When the company is assigned an airlift mission, the commander will take immediate steps to accomplish liaison with the supported unit.

(3) If the operation is to be supported by Army pathfinders or terminal guidance personnel, team leaders and aviators must coordinate radio aids, frequencies, and other required landing aids; i.e., colored smoke, panels, and ground-handling personnel.

18-5. Aviation General Support Company, Combat Aviation Battalion Airborne Division, TOE 7-68

a. Mission. The normal mission of the aviation general support company is to provide aviation support for the division headquarters, division support command, and other units without organic aircraft. In addition, it provides limited general support and reinforcement to units with organic aircraft, limited aerial escort for airmobile operations, and supplemental direct aerial fire support to combat elements of the division.

b. Assignment. The company is assigned to the combat aviation battalion, airborne division, TOE 7-65.

c. Capabilities. This unit can provide—

(1) Continuous operations during visual flight conditions and limited operations under instrument flight conditions.

(2) Aerial observation, reconnaissance, and surveillance of enemy areas for locating, verifying, and evaluating targets, conducting terrain study, and providing fire adjustment.

(3) Aerial radiological survey; aerial personnel detector operations; aerial dissemination of CS, smoke, and flame; and small area defoliation operations.

(4) Command, control and communications, liaison, and reconnaissance.

(5) Augmentation of aeromedical evacuation.

(6) Aerial delivery of psychological operations leaflets, and loudspeaker broadcasts.

d. Organization. The aviation general support company consists of a company headquarters, general support platoon, and service platoon.

(1) *Company headquarters.* The company headquarters performs administrative, operational, and supply functions.

(2) *General support platoon.* The general support platoon is composed of a platoon headquarters, a utility support section, and a tactical support section. The platoon provides aircraft to support the division headquarters, division support command, and other division units without organic aircraft, and limited general support reinforcement to division units with organic aircraft. The platoon provides the aerial mobility required for command, control, liaison, observation, augmentation of aeromedical evacuation means, reinforcement for airmobile operations, and limited logistical transport service. The platoon commander and the company operations officer exercise necessary control to prevent duplication of missions and insure maximum use of assigned aircraft.

(3) *Service platoon.* The service platoon consists of the service platoon headquarters, aircraft maintenance section, communications maintenance section, and airfield service section. It provides organizational maintenance for organic avionics and sensor equipment, aircraft parts resupply, and refueling service. The platoon headquarters and its maintenance and service elements will normally be located in the same general area as the company headquarters. The tactical situation will dictate the degree of dispersion required.

e. Concept of Employment.

(1) The aviation general support company is employed as directed by the aviation battalion commander and operates from the division instrumented airfield. Together, the aviation battalion headquarters and headquarters company and the aviation general support company establish and operate the division instrumented airfield. Messing facilities are provided by the headquarters company. The company contains the personnel and equipment necessary to provide continuous and responsive aviation support to the division. It performs its own organizational maintenance, and provides its own supply and communications, but depends upon the division for personnel administration. Organization of the sections within the company permits flexible employment to

meet operational requirements. The general support platoon provides aviation support for those divisional units without organic aircraft, or limited reinforcement for those units with organic aircraft. The company establishes and maintains a heliport adjacent to the division main command post to support the division commander and his staff. This responsibility is normally assigned to the general support platoon commander, who coordinates the location of the heliport with the division headquarters commandant.

(2) The company commander must anticipate plans for the employment of his company. To insure proper coordination, he maintains close liaison with the S3 of the battalion. The success of the mission depends upon the planning and coordination between the supported and supporting commanders. The supporting commander establishes and maintains liaison with the supported unit. Liaison officers act as technical advisors in all matters pertaining to their respective units. The amount and type of planning and coordination will vary with each mission. To extend the effect of the available aviation support, close and continuous coordination with supported unit commanders is required.

18-6. Assault Helicopter Company, Combat Aviation Battalion, Infantry Division, TOE 7-77

a. Mission. The normal mission of the assault helicopter company is to provide tactical air movement of combat troops, supplies, and equipment within the combat zone.

b. Assignment. This company is assigned to the combat aviation battalion, infantry division, TOE 7-75.

c. Capabilities. This unit can provide—

(1) Continuous operations during visual weather conditions and limited operations under instrument weather conditions.

(2) In a single lift, airlift for the assault elements of one infantry or dismounted mechanized infantry company.

(3) Air movement of troops, supplies, and equipment within the combat zone.

(4) Augmentation of aeromedical evacuation.

d. Organization. The assault helicopter company consists of the company headquarters, three airlift platoons, and a service platoon.

(1) *Company headquarters.* The company headquarters performs the administrative, mess, and supply functions. Normally, the

company headquarters will be established in an area which is centrally located in relation to the airlift platoons, with distance depending on terrain and probability of nuclear attack. A company heliport will be established for use by the command post group and the service platoon.

(2) *Airlift platoons (3).* Each of the three airlift platoons consists of a platoon headquarters and two airlift sections of four helicopters each. These platoons provide the personnel and equipment necessary to operate the aircraft and perform a portion of the organizational maintenance on the helicopters. The airlift platoons provide tactical air movement of troops and materiel; a means of vertical infiltration for behind-the-lines raiding parties, special forces personnel and patrols, and for recovering them on short notice from small predesignated areas; support and reinforcement missions as directed; and facilities for movement of engineer or CBR teams and munitions.

(3) *Service platoon.* The service platoon consists of a platoon headquarters, aircraft maintenance section, communications maintenance section, and an airfield service section. It provides organizational maintenance services for the airmobile company's helicopters, vehicles, small arms, and communications equipment.

e. Concept of Employment.

(1) The assault helicopter company is most effective when used as a unit, but it can be fragmented if necessary. With assistance from its parent or supported unit, a platoon or section can operate detached from its parent unit for an extended period. The efforts of the other sections in the company are directed toward support of the airlift platoons. The company operates from its own dispersal or assembly area in the division rear area within the perimeter of one of the tactical units of the division reserve. It is habitually employed in support of the division in forward areas of the combat zone. Prepared landing areas are not required for its operations.

(2) The planning and coordination necessary for the support of a unit will vary according to the mission of the supported unit. The assault helicopter company commander can best maintain his unit in a state of readiness through close and continuous coordination with the division aviation battalion commander. When the company is assigned an airlift mission, the commander will take immediate

steps to accomplish liaison with the supported unit.

(3) If the operation is to be supported by Army pathfinders or terminal guidance personnel, team leaders and aviators must coordinate radio aids, frequencies, and other required landing aids; i.e., colored smoke, panels, ground-handling personnel, etc.

18-7. Aviation General Support Company, Combat Aviation Battalion, Infantry Division, TOE 7-78

a. Mission. The normal mission of the aviation general support company is to provide aviation support for the division headquarters, division support command, and other units without organic aircraft. In addition, it provides limited general support and reinforcement to units with organic aircraft.

b. Assignment. The company is assigned to the combat aviation battalion, infantry division, TOE 7-75.

c. Capabilities. This unit can provide—

(1) Continuous operations during visual flight conditions and limited operations under instrument flight conditions.

(2) Aerial observation, reconnaissance, and surveillance of enemy areas for locating, verifying, and evaluating targets, conducting terrain studies, and providing fire adjustment.

(3) Battlefield illumination.

(4) Aerial radiological survey; aerial personnel detector operations; aerial dissemination of CS, smoke, and flame; and small area defoliation operations.

(5) Command, control, liaison, and reconnaissance.

(6) Augmentation of aeromedical evacuation.

(7) Aerial delivery of psychological operations leaflets and loudspeaker broadcasts.

d. Organization. The aviation general support company consists of a company headquarters, general support platoon, and service platoon.

(1) *Company headquarters.* The company headquarters performs administrative, operational, supply, and mess functions.

(2) *General support platoon.* The general support platoon is composed of a platoon headquarters, a utility support section, and a tactical support section. The platoon provides helicopters to support the division headquarters, division support command, and other division units without organic aircraft, and limited general support and reinforcement to division units with organic aircraft. The platoon provides the

aerial mobility required for command, control, liaison, observation, augmentation of aeromedical evacuation means, reinforcement for airborne operations, and limited logistical transport service. The platoon commander and the company operations officer exercise necessary control to prevent duplication of missions and to insure maximum use of assigned helicopters.

(3) *Service platoon.* The service platoon consists of the service platoon headquarters, aircraft maintenance section, communications maintenance section, and airfield service section. It provides organizational maintenance for organic aircraft and wheeled vehicles, communications and sensor maintenance, aircraft parts resupply, refueling service, and limited armament kit maintenance. The platoon headquarters and its maintenance and service elements will normally be located in the same general area as the company headquarters. The tactical situation will dictate the degree of dispersion required.

e. Concept of Employment.

(1) The aviation general support company is employed as directed by the aviation battalion commander and operates from the division instrumented airfield. Together, the aviation battalion headquarters and headquarters company and the aviation general support company establish and operate the division instrumented airfield. The company contains the personnel and equipment necessary to provide continuous and responsive aviation support to the division. It performs its own organizational maintenance, and provides its own supply and communications, but depends upon the division administration company for personnel administration. Organization of the sections within the company provides flexible employment to meet operational requirements. The general support platoon provides aviation support for those divisional units without organic aircraft, or limited reinforcement for those units with organic aircraft. The company establishes and maintains a heliport adjacent to the division main command post to support the division commander and his staff. This responsibility is normally assigned to the general support platoon commander, who coordinates the location of the heliport with the division headquarters commandant.

(2) The company commander must anticipate plans for the employment of his company. To insure proper coordination, he maintains close liaison with the S3 of the battalion. The

success of a mission depends upon the planning and coordination between the supported and supporting commanders. The supporting commander establishes and maintains liaison with the supported unit. Liaison officers act as technical advisors in all matters pertaining to their respective units. The amount and type of planning and coordination will vary with each mission. To extend the effect of the available aviation support, close and continuous coordination with supported unit commanders is required.

18-8. Division Aviation Company, TOE 17-87/37-87

a. Mission. The normal mission of the division aviation company is to provide aviation support to the division headquarters.

b. Assignment. The company is assigned to the armored division, TOE 17, or infantry division (mechanized), TOE 37.

c. Capabilities. This unit can provide—

(1) Aircraft for command, control, and liaison as required by the division commander and staff.

(2) An instrumented airfield with terminal facilities to include 24-hour ground controlled approach guidance.

(3) En route air traffic control and access into the Army air traffic control system.

(4) Emergency air weather warnings to aircraft.

(5) Minimum refueling support for transient aircraft.

(6) Emergency maintenance for transient aircraft.

d. Organization. The division aviation company consists of a company headquarters, air traffic control platoon, general support platoon, and a service platoon.

(1) *Company headquarters.* Headquarters personnel accomplish company administration, except personnel administration. The company will normally be located at the division instrumented airfield.

(2) *Air traffic control platoon.* The air traffic control platoon consists of the platoon headquarters, flight coordination center, airfield terminal control section, and a communications section. This platoon coordinates the flight communication and air traffic control of the division aircraft, and provides air traffic control in the vicinity of the division airfield and instrument flight facilities. The communications section maintains the organic communications and air traffic control equipment. It

is the focal point for the company's internal wire and radio communications, and establishes an internal wire net.

(3) *General support platoon.* The general support platoon consists of a platoon headquarters, a utility support section, and a command and control section. The platoon provides the aerial mobility required for command, control, and liaison functions.

(4) *Service platoon.* The service platoon consists of a platoon headquarters, aircraft maintenance section, and an airfield service section. The aircraft maintenance section provides organizational maintenance for assigned vehicles and emergency maintenance for transient aircraft. The airfield service section provides for crash rescue, aircraft servicing, and transient service at the division airfield.

e. Concept of Employment. The division aviation company establishes and operates the division instrumented airfield. It also operates and maintains a heliport adjacent to the division main command post to support the division commander and his staff. The company contains the personnel and equipment necessary to provide continuous and responsive aviation support to the division. The company performs its own organizational maintenance and provides its own supply and communications, but depends on the division administration company for personnel administration. Organization of the sections within the company provides flexible employment to meet operational requirements.

18-9. Aviation General Support Company, Combat Aviation Group, Airmobile Division, TOE 7-202

a. Mission. The normal mission of the aviation general support company is to provide aviation support for the division headquarters, aviation group headquarters, support command, and other units without organic aircraft. In addition, it provides electronic surveillance and acquires combat intelligence and target information for the airmobile division.

b. Assignment. The company is assigned to the combat aviation group, airmobile division, TOE 7-200.

c. Capabilities. This unit can provide—

(1) Near continuous operations, day and night, during visual flight conditions and limited operations under instrument flight conditions.

(2) Aerial observation, reconnaissance and surveillance of enemy areas for locating, verifying, and evaluating targets, conducting terrain studies, and providing fire adjustment.

(3) Aircraft for aerial command post control, liaison, reconnaissance, and radio relay for the division.

(4) Augmentation for aeromedical evacuation.

(5) Rapid aerial photography, consisting of daylight vertical and oblique photography and night vertical photography.

(6) Battlefield illumination and local small area smokescreens for combat elements of the division.

(7) Aerial delivery of psychological operations leaflets and loudspeaker broadcasts.

(8) Aerial radiological survey and aerial detector operations.

d. Organization. The aviation general support company consists of a company headquarters, surveillance platoon, support platoon, utility platoon, and a service platoon.

(1) *Company headquarters.* The company headquarters performs administrative, mess, and supply functions.

(2) *Surveillance platoon.* The surveillance platoon provides aerial observation, reconnaissance, and surveillance by visual, radar, infrared, and photographic means for the division.

(3) *Support platoon.* The support platoon provides general aviation support (within its capabilities) to the division headquarters and other elements of the division requiring this type support.

(4) *Utility platoon.* The utility platoon provides general and utility support for the division headquarters and other elements of the division.

(5) *Service platoon.* The service platoon has no assigned aircraft but provides aircraft maintenance and services.

e. Concept of Employment. The aviation general support company and the aviation battalion headquarters and headquarters company establish and operate the division instrumented airfield. The aviation general support company also operates and maintains a heliport adjacent to the division main command post to support the division commander and his staff. The heliport has a day and night capability, but normally is not instrumented. The company contains the personnel and equipment necessary to provide continuous and responsive aviation support to the division. It is capable of providing limited aerial fire support to divisional units and aerial escort and direct fire

support for airmobile operations. The company performs its own organizational maintenance and provides its own supply and communications, but depends upon the division administration company for personnel administration. Organization of the sections within the company provides flexible employment to meet operational requirements. Helicopters of the company normally are employed on a mission-type basis. Aircraft employed on a continuous support basis are identified in the division or aviation group operations order. Aircraft not committed and those due maintenance are retained at the base airfield.

18-10. ATTACK HELICOPTER COMPANY, TOE 17-111

a. Mission. The normal mission of the attack helicopter company is to provide direct aerial fire support to the ground commander as an integral part of a highly mobile combined arms team.

b. Assignment. The company is assigned to corps, field army, or separate task force, as required.

c. Capabilities. This unit can provide—

(1) Armed aerial escort and direct aerial fires for airmobile operations to include:

(a) En route of troop-carrying helicopters.

(b) Neutralization fires in the landing zone during execution of the air landing phase.

(c) Direct aerial fires in support of the air landed force during their maneuver phase.

(d) Direct aerial fires in support of reconnaissance and security elements of the air landed force.

(2) Effective quick reaction aerial fires in support of other ground forces to include—

(a) Direct aerial fires against enemy mechanized/armor forces.

(b) Direct aerial fires in operations against guerrilla forces in rear areas.

(c) Direct aerial fires against insurgent forces in internal defense operations.

d. Organization. The attack helicopter company is composed of a company headquarters, a flight operations section, three attack helicopter platoons, and a service platoon.

(1) *Company headquarters.* The company headquarters provides supply, mess, and administrative activities.

(2) *Flight operations section.* The flight operations section performs dispatch and administration related to flight operations, and es-

tablishes and mans the internal radio and wire communications of the company.

(3) *Attack helicopter platoons (3).* Each of the attack helicopter platoons is composed of a platoon headquarters and four attack helicopter sections.

(4) *Service platoon.* The service platoon is composed of the platoon headquarters, aircraft maintenance section, and aircraft service section.

e. Concept of Employment.

(1) The company is a self-contained unit capable of independent operation, and habitually operates from its own dispersal or assembly area. Equipment is lightweight, and only absolutely essential items are authorized. With the exception of $\frac{3}{4}$ -ton and $2\frac{1}{2}$ -ton trucks, all equipment is air transportable by helicopters of the assigned assault helicopter companies. During movements, additional ground vehicles and/or aircraft are required to transport the company. When on the ground, telephone is the normal means of communication among company elements. Single sideband (SSB) and high frequency (HF) voice radio is used for communication with higher headquarters, flight operations center, liaison officers, supported units, and distant inflight elements of the battalion. Frequency modulated (FM) and ultra high frequency (UHF) voice radio provides communication with relatively near inflight elements.

(2) The company is organized and equipped to operate as a unit; however, platoon-size teams may be tailored to accomplish a given mission. Therefore, only those elements essential to mission accomplishment are committed. The company can be employed independently to attack enemy-held positions, and as part of a highly mobile combined arms team in offensive, defensive, and delaying actions, in addition to the role of escort for airmobile forces. Aerial gunnery techniques are discussed in FM 1-40.

(3) The company may be employed to reinforce the fires of aerial field artillery units organic to divisions. Procedures to be followed when providing this fire support are contained in FM 6-102.

18-11. Corps Aviation Company, TOE 1-127

a. Mission. The normal mission of the corps aviation company is to provide the corps headquarters and subordinate elements with immediately available Army aviation support and IFR terminal control facilities.

b. Assignment. The company is assigned to corps.

c. Capabilities. This unit can provide—

(1) Air movement of high priority personnel and emergency aerial resupply of critical parts and supplies.

(2) Aerial transportation for corps commander and staff.

(3) Facilities for the operation of an instrumented airfield within the corps area.

(4) Aircraft for column control, radio relay, and messenger service; radiological survey; road net reconnaissance, and traffic survey.

(5) Communications and airfield service for the corps base airfield.

(6) Augmentation of aeromedical evacuation.

d. Organization. The corps aviation company consists of a company headquarters, operations platoon, aircraft platoon, and service platoon.

(1) *Company headquarters.* The company headquarters provides command, control, and normal unit administration, mess, supply, operation, and maintenance of assigned vehicles. The company command post will normally be located near the company instrumented airfield.

(2) *Operations platoon.* The operations platoon consists of a platoon headquarters, flight dispatch section, air traffic control section, approach control section, and a communications section. The platoon headquarters supervises the operation and administration of the platoon to maintain operations on a 24-hour basis. The flight dispatch section accomplishes coordination and assignment of flight missions. The air traffic control section operates the air traffic control equipment, and it contains all communications, signals, and aids required to conduct its control functions. The approach control section operates the GCA equipment at the airfield. The communications section provides communications and maintains navigational facilities for the company instrumented airfield and the aviation company.

(3) *Aircraft platoon.* The aircraft platoon provides direct aviation support to the corps commander and staff for command and liaison visits, and for aerial reconnaissance and observation. It supports various corps units in carrying out missions which are best supported by aircraft. This platoon normally operates from the company instrumented airfield; however, it is designed to operate as a separate

echelon if required. Flight missions are assigned by the operations officer.

(4) *Service platoon.* The service platoon consists of a platoon headquarters, a maintenance section, and an airfield service section. This platoon provides aviation supplies, organizational aircraft maintenance, and airfield service for the corps aviation company. It operates from the company instrumented airfield in the vicinity of the operations platoon.

e. Concept of Employment.

(1) The corps aviation company will normally be employed as directed by the corps commander. Adequate navigational and lighting equipment is available within the company to permit it to establish and operate the corps instrumented airfield. When extended frontages and multiple command posts preclude operation from the corps instrumented airfield, the company commander will establish another airfield for the company and employ the company in echelon. Each echelon should contain a command element and sufficient personnel, equipment, and communications to permit sustained operation separate from the remainder of the company.

(2) The corps aviation company is organized on the principle of grouping the aircraft by type and mission. The headquarters and service elements of the company will operate the company instrumented airfield; and, when feasible, all flight elements should operate from this airfield. However, the flight elements of the company are organized to permit decentralization of operations to satellite landing areas. Minimum communications are authorized to provide continuing company control under decentralized conditions.

(3) With the exception of aircraft maintenance and supply, the corps aviation company receives its administrative support from the corps. Echelons of maintenance beyond the capabilities of the company are provided by direct support transportation aircraft maintenance units. Supply of aircraft parts, components, and expendables, and evacuation of nonflyable aircraft are the responsibility of the supporting aircraft maintenance units.

18-12. Army Aviation Company, TOE 1-137

a. Mission. The normal mission of the army aviation company is to provide the field army headquarters and subordinate elements with immediately available Army aviation support and IFR terminal control facilities.

b. Assignment. The company is assigned to the field army.

c. Capabilities. This unit can provide—

(1) Air movement of high priority personnel and emergency aerial resupply of critical parts and supplies.

(2) Aerial transportation for field army commander and staff.

(3) Facilities for the operation of an instrumented airfield within the army area.

(4) Aircraft for column control, radio relay, and messenger service; radiological survey; and road net reconnaissance and traffic survey.

(5) Communications and airfield service for the army base airfield.

(6) Augmentation of aeromedical evacuation.

d. Organization. The army aviation company consists of a company headquarters, operations platoon, aircraft platoon, and service platoon.

(1) *Company headquarters.* The company headquarters provides command, control, normal unit administration, mess, supply, operation, and maintenance of assigned vehicles. The company command post will normally be located near the company instrumented airfield.

(2) *Operations platoon.* The operations platoon consists of a platoon headquarters, flight dispatch section, air traffic control section, approach control section, and a communications section. The platoon headquarters supervises the operation and administration of the platoon to maintain operations on a 24-hour basis. The flight dispatch section accomplishes coordination and assignment of flight missions. The air traffic control section operates air traffic control equipment; and it contains all communications, signals, and aids required to conduct its control functions. The approach control section operates the GCA equipment at the airfield. The communications section provides communications and maintains navigational facilities for the company instrumented airfield and the aviation company.

(3) *Aircraft platoon.* The aircraft platoon provides direct aviation support to the army commander and staff for command and liaison visits, and for aerial reconnaissance and observation. It supports various army units in carrying out missions which are best supported by aircraft. This platoon normally operates from the company instrumented airfield; however, it is designed to operate as a separate echelon if required. Flight missions are as-

signed by the operations officer.

(4) *Service platoon.* The service platoon consists of a platoon headquarters, a maintenance section, and an airfield service section. This platoon provides aviation supplies, organizational aircraft maintenance, and airfield service for the army aviation company. It operates from the company instrumented airfield in the vicinity of the operations platoon.

e. Concept of Employment.

(1) The army aviation company will normally be employed as directed by the field army commander. Adequate navigational and lighting equipment is available within the company to permit it to establish and operate the army instrumented airfield. When extended frontages and multiple command posts preclude operation from the army instrumented airfield, the company commander will establish another airfield for the company and employ the company in echelon. Each echelon should contain a command element and sufficient personnel, equipment, and communications to permit sustained operation separate from the remainder of the company.

(2) The army aviation company is organized on the principle of grouping the aircraft by type and mission. The headquarters and service elements of the company will operate the company instrumented airfield; and, when feasible, all flight elements should operate from this airfield. However, the flight elements of the company are organized to permit decentralization of operations to satellite landing areas. Minimum communications are authorized to provide continuing company control under decentralized conditions.

(3) With the exception of aircraft maintenance and supply, the army aviation company receives its administrative support from the field army. Echelons of maintenance beyond the capabilities of the company are provided by direct support transportation aircraft maintenance units. Supply of aircraft parts, components, and expendables, and evacuation of nonflyable aircraft are the responsibility of the supporting aircraft maintenance units.

18-13. Attack Helicopter Company, Assault Helicopter Battalion, Airmobile Division, TOE 7-257

a. Mission. The normal mission of the attack helicopter company is to provide security for airmobile forces and to participate in offensive, defensive, and delaying actions as part of a highly mobile combined arms team.

b. Assignment. The company is assigned to

the assault helicopter battalion, airmobile division, TOE 7-255.

c. Capabilities. This unit can provide—

(1) Armed aerial escort and aerial neutralization fire support of airmobile forces.

(2) Participation in semi-independent operations as required.

(3) Effective aerial neutralization fires for counter guerrilla forces.

d. Organization. The attack helicopter company is composed of a company headquarters, a flight operations section, three weapons platoons, and a service platoon.

(1) *Company headquarters.* The company headquarters provides supply, mess, and administrative functions.

(2) *Flight operations section.* This section supervises the flight operations and establishes and maintains the internal radio and wire communications of the company.

(3) *Attack helicopter platoons (3).* The attack helicopter platoon contains the helicopters and armament authorized for the company mission.

(4) *Service platoon.* The service platoon provides helicopter and vehicle maintenance, electronic repairs, ammunition storage, aircraft refueling, and crash rescue services.

e. Concept of Employment. The attack helicopter company may be employed as a unit or as separate platoons. In support of airmobile forces, the company provides security and neutralization fires on call and is normally under the control of the lift unit commander. When placed in support of a specific ground unit, the company provides on-call fires and operates under the control of the supported ground unit commander. In either event, fires of the attack helicopter company are normally included in the fire support plan as on-call fires and are fully coordinated with the scheme of maneuver, which includes the flight route.

18-14. Assault Helicopter Company, Assault Helicopter Battalion, Airmobile Division, TOE 7-258

a. Mission. The normal mission of the assault helicopter company is to provide tactical mobility for combat troops, supplies, and equipment in airmobile operations.

b. Assignment. The company is assigned to the assault helicopter battalion, airmobile division, TOE 7-255.

c. Capabilities. This unit can provide—

(1) Near continuous, day and night operations during visual weather conditions and limited operations under instrument weather conditions.

(2) Air movement of troops, supplies, and equipment within the combat zone.

(3) Augmentation of aeromedical evacuation.

d. Organization. The assault helicopter company is composed of a company headquarters, two assault helicopter platoons, a flight operations section, and a service platoon.

(1) *Company headquarters.* The company headquarters contains sufficient personnel to perform the administrative, mess, and supply functions.

(2) *Assault helicopter platoons (2).* Each of the two assault helicopter platoons consists of a headquarters and two assault helicopter sections. Missions are received from the flight operations section or, when temporarily detached from the company, the supported unit. The platoon is usually employed on company missions under control of the company commander, but may be employed as a separate platoon on a mission basis only.

(3) *Flight operations section.* The flight operations section establishes and operates the company heliport and assists the company headquarters in operational control of the company.

(4) *Service platoon.* The service platoon contains a platoon headquarters, aircraft maintenance section, and an aircraft service section. The platoon is located near the company heliport. It provides organizational maintenance and services required for company aircraft, to include aircraft armament, vehicles, and avionics equipment. The platoon provides POL services to aircraft assigned to the company.

e. Concept of Employment. The assault helicopter company is organized and equipped to provide airlift for the movement of troops, supplies, and equipment across the battlefield. The company is habitually employed in support of operations in the combat zone to support units conducting airmobile operations. The company is usually placed in direct support or under the operational control of the unit to be supported. It normally operates from its own dispersal or assembly area in division rear areas within the perimeter of one of the tactical units of the division reserve. The company has its own support and is capable of being employed for extended periods of time as a separate company. Although it is most effective when employed as a unit, the assault helicopter company may be fragmented if necessary. Platoons employed on independent missions for extended periods depend on the company or supported unit for support.

18-15. Assault Support Helicopter Company, Assault Support Helicopter Battalion, Airmobile Division, TOE 1-167

a. Mission. The normal mission of the assault support helicopter company is to provide tactical mobility for combat troops, supplies, and equipment in combat and airmobile operations.

b. Assignment. The company is assigned to the assault support helicopter battalion, airmobile division, TOE 1-165T.

c. Capabilities. This unit can provide—

(1) Near continuous, day and night operations during visual flight conditions and limited operations under instrument flight conditions in support of the division.

(2) In a single lift, airlift for the assault elements of two infantry companies, the combat elements of one 105-mm howitzer battery, 30,000 pounds of cargo or an equivalent logistical load, or any combination thereof.

(3) Augmentation of aeromedical evacuation.

d. Organization. The assault support helicopter company is composed of a company headquarters, two assault support helicopter platoons, a flight operations section, and a service platoon.

(1) *Company headquarters.* The company headquarters contains sufficient personnel to perform the administrative, mess, and supply functions of the company.

(2) *Assault support helicopter platoons* (2). Each of the two assault support helicopter platoons contains a platoon headquarters and two assault support helicopter sections. Missions are received from the operations section or, when temporarily detached from the company, the supported unit. Each assault support helicopter section contains personnel to operate and perform organizational maintenance on the section's helicopters.

(3) *Flight operations section.* The flight operations section contains the personnel needed to perform the company's operations and communications functions.

(4) *Service platoon.* The service platoon consists of a headquarters, aircraft service section, and two aircraft maintenance sections. The platoon provides organization maintenance and services required for company aircraft to include aircraft armament, vehicles, and avionics equipment, and it provides POL services to aircraft.

e. Concept of Employment. The battalion is employed as the primary means of moving the

artillery and combat engineers on the battlefield. It is also employed to move combat troops, logistical elements of the infantry battalion, and the brigade forward command post. Habitually, the assault support helicopter battalion will operate in general support of the division. One or more of its subordinate units may be placed in direct support of a brigade. When this occurs, coordination and mission requirements will be received through the brigade staff or aviation group liaison officer. Normal employment of the assault support helicopter companies is on a mission basis.

18-16. Reconnaissance Helicopter Company, TOE 1-177

a. Mission. The normal mission of the reconnaissance helicopter company is to provide combat elements with area surveillance, reconnaissance, and target acquisition through visual observation and limited photographic means.

b. Assignment. The company is assigned to corps, field army, or separate task force.

c. Capabilities. This unit can provide—

(1) Day and night operations during visual flight conditions.

(2) Aerial observation by visual and limited photographic means for locating, verifying, and evaluating targets.

(3) Aircraft for liaison and radio relay.

(4) Limited battlefield illumination for combat elements.

(5) Limited weather reconnaissance and advisories.

(6) Target acquisition and fire adjustment, to include artillery, naval gunfire, armed helicopter, or tactical airstrikes.

d. Organization. The reconnaissance helicopter company consists of a company headquarters, flight operations platoon, four reconnaissance platoons, and a service platoon.

(1) *Company headquarters.* The company headquarters provides administrative, mess, and supply functions.

(2) *Flight operations platoon.* The flight operations platoon contains sufficient personnel to provide operations on a 24-hour basis. The section also provides intelligence briefings and debriefings and disseminates intelligence information to U.S. and allied forces as directed. This platoon has the communications personnel necessary to establish and maintain wire and radio nets. It also advises and assists the company commander in all communications planning.

(3) *Reconnaissance platoons.* Each of the four reconnaissance platoons is organized with a platoon headquarters and four sections which contain the aircraft required to conduct its specialized missions.

(4) *Service platoon.* The service platoon consists of a platoon headquarters, aircraft maintenance section, airfield service section, and an aircraft systems repair section. The service platoon schedules and supervises vehicle and aircraft organizational maintenance, aircraft servicing, and crash rescue. It also performs expanded organizational maintenance on organic aircraft and avionics equipment.

e. Concept of Employment. The reconnaissance helicopter company normally will be attached to a nondivisional aviation battalion in the corps area to provide an area surveillance/reconnaissance capability for a three division corps force.

(1) The company is a semi-independent unit capable of day and night surveillance of the supported area during VFR weather conditions. The company depends upon the unit to which attached for administrative and logistical support.

(2) Composition and employment of the company will vary with the specific mission requirements. The basic unit is the reconnaissance section equipped with the light observation helicopter (LOH). Normally, one reconnaissance platoon (consisting of four reconnaissance sections) will support a division attached to the corps force. The fourth reconnaissance platoon will support the headquarters to which the unit is attached. When required, a platoon or several sections may be detached from the company for short periods and operate independently.

18-17. Assault Support Helicopter Company, TOE 1-258

a. Mission. The normal mission of the assault support helicopter company is to provide air transport of personnel and cargo for combat service support and combat support operations.

b. Assignment. The company is assigned to a field army, theater army support command, or other commands as required. Normally, it is attached to headquarters and headquarters company, aviation battalion, TOE 1-256.

c. Capabilities. This unit can provide—

(1) Transport of troops and supplies under day, night, or limited visibility conditions.

(2) Air mobility and air supply and resupply of army forces.

(3) Augmentation of aeromedical evacuation.

d. Organization. The assault support helicopter company consists of a company headquarters, an operations platoon, two helicopter platoons, and a service platoon.

(1) *Company headquarters.* The company headquarters performs the administrative, mess, and supply functions. Normally, the company headquarters will be established in an area which is centrally located to the helicopter platoons. The distance from the platoons will vary according to the terrain and probability of nuclear attack. Radio communications will be used until wire lines have been installed.

(2) *Operations platoon.* The operations platoon maintains flight records, prepares reports, dispatches aircraft and operates the ground and radio communications nets.

(3) *Helicopter platoons* (2). The helicopter platoons provide the air transport capability of the company. When the platoons are attached or placed under operational control or in direct support of a unit, they will require limited administrative support from that unit. When not supporting a unit, the platoon will establish a platoon area and heliport close enough to the company command post and service elements to use the company's administrative support.

(4) *Service platoon.* The service platoon consists of a platoon headquarters, two maintenance sections, airfield service section, and an aircraft systems repair section. The service platoon schedules and supervises vehicle and aircraft organizational maintenance, aircraft servicing, and crash rescue. It also performs expanded organizational maintenance on organic aircraft and avionics equipment.

e. Concept of Employment. The assault support helicopter company is normally assigned to an aviation battalion and is employed as directed by the battalion commander. The corps aviation group commander, under direction of the corps commander, will control the allocation of the capabilities of this unit. Each helicopter platoon, with sufficient organizational maintenance personnel, is capable of being attached to a supported unit for specific missions. The company depends on a transportation aircraft direct support company for backup direct support maintenance.

(1) The company contains the personnel and equipment to control and supervise company operations, and to provide its own admin-

istrative and mess support. It normally operates under the control of the airmobile battalion commander and provides transportation of troops and supplies for units conducting airmobile operations. The company is normally employed as an integral unit in support of the battalion mission; however, the helicopter platoons may be attached to, placed in direct support of, or placed under the operational control of troop units for specific missions.

(2) The company may be attached to a major corps unit and employed with corps troops. When employed with corps troops, the company may be further attached, placed in direct support, or under the operational control, of subordinate corps units.

(3) The company will be further placed in direct support, or under operational control, of command echelons capable of providing adequate communications and control facilities. This is normally at division level. In addition, for special or separate missions for a short period of time, the company may be placed under operational control at brigade level. When operating from the company heliport, the platoons are included in the company security plan. When operating away from the company, security must be provided by the supported unit.

(4) Both radio and wire communications are organic to the assault support helicopter company. The communications equipment of the unit provides the capability for the unit to support its operations and link it with higher headquarters. The communications center operates at the company heliport immediately adjacent to the company headquarters and serves as a message center and a focal point for all company command radio and wire communications nets.

18-18. Heavy Helicopter Company, TOE 55-259

a. Mission. The normal mission of the heavy helicopter company is to provide combat service support airlift for movement of heavy supplies, vehicles, aircraft and equipment and, as directed, to provide combat support airlift of combat units and air supply of units engaged in combat operations.

b. Assignment. The company is assigned to an aviation group, TOE 1-252. Normally, it is attached to headquarters and headquarters company, aviation battalion, TOE 1-256.

c. Capabilities. This unit can provide—

(1) Transport of heavy lift items, within

100-mile radius, under day, night, or limited visibility conditions.

(2) Establishment of local air traffic control at loading and unloading areas.

(3) Airmobility and aerial supply and resupply of combat forces in the combat zone.

(4) Movement of specialist teams, critical items, and critical supplies and parts.

d. Organization. The aviation heavy helicopter company consists of a company headquarters, flight operations platoon, three heavy helicopter platoons, and a maintenance platoon.

(1) *Company headquarters.* The company headquarters provides unit mess, supply, administration, and wheel vehicle maintenance. The headquarters has the capability for both FM radio and wire communications.

(2) *Flight operations platoon.* The flight operations platoon consists of the platoon headquarters, communications section, and airfield service section. It maintains flight records, prepares reports, dispatches aircraft, and operates the ground and radio communications nets. The platoon also provides aircraft servicing and crash rescue.

(3) *Heavy helicopter platoons (3).* The heavy helicopter platoon provides the lift capability of the company, using the three CH-54 helicopters organic to the platoon.

(4) *Maintenance platoon.* The maintenance platoon consists of a platoon headquarters, three maintenance sections, and an aircraft systems repair section. The platoon headquarters performs the supply and administrative functions. The section structure permits the normal employment of one maintenance section per heavy helicopter platoon; however, the maintenance resources may be combined as required. This platoon also performs expanded organizational maintenance on organic aircraft and avionics equipment.

e. Concept of Employment. The aviation heavy helicopter company is normally attached to the aviation battalion and is employed as directed by the battalion commander, based on the missions assigned by the aviation group headquarters. Depending on the policies and SOP established by the FASCOM commander, missions may be received directly from a transportation movement control team located near the helicopter company's base of operations.

18-19. Assault Helicopter Company, Separate, TOE 7-357

a. Mission. The normal mission of the as-

sault helicopter company, separate, is to provide tactical air movement of combat troops, supplies, and equipment within the combat zone.

b. *Assignment.* The company is assigned to field army, theater army support command, or other commands as required. Normally, it is attached to the combat aviation battalion, TOE 1-256.

c. *Capabilities.* This unit can provide—

(1) Near continuous, day and night operations during visual flight conditions and limited operations under instrument flight conditions.

(2) In a single lift, under optimum conditions, airlift for the assault elements of one infantry or dismounted mechanized infantry company.

(3) Air movement of troops, supplies, and equipment within the combat zone.

(4) Augmentation of aeromedical evacuation.

(5) Armed aerial escort for organic airlift platoons during movement, combat assault, or combat extraction.

d. *Organization.* The assault helicopter company consists of a company headquarters, operations platoon, two airlift platoons, armed helicopter platoon, and a service platoon.

(1) *Company headquarters.* The company headquarters performs administrative, mess, motor maintenance, and supply functions.

(2) *Operations platoon.* The operations section includes sufficient flight operations and communications personnel to provide 24-hour per day operation.

(3) *Airlift platoons (2).* Each platoon has a headquarters to coordinate the mission and maintenance requirements for two airlift sections. The four airlift sections perform the helicopter airlift operations.

(4) *Attack helicopter platoon.* Aircraft of this platoon perform armed aerial escort for the organic airlift platoons. The platoon has a headquarters and two attack helicopter sections.

(5) *Service platoon.* The service platoon consists of a platoon headquarters, aircraft system repair section, aircraft maintenance section, aircraft armament section, avionics repair section, and airfield service section. The platoon provides both organizational and direct support maintenance for aircraft, aircraft weapons systems, and avionics equipment; it provides crash rescue and refueling services, and general airfield assistance.

e. *Concept of Employment.* The assault heli-

copter company is organized and equipped to provide airlift for the movement of troops, supplies, and equipment across the battlefield. The company is habitually employed in support of operations in the combat zone to support units conducting airmobile operations. The company is usually placed in direct support or under the operational control of the unit to be supported. It normally operates from its own dispersal or assembly area in division rear areas within the perimeter of one of the tactical units of the division reserve. The company has its own support and is capable of being employed for extended periods of time as a separate company. Although it is most effective when employed as a unit, the assault helicopter company may be fragmented if necessary. Platoons employed on independent missions for extended periods depend on the company or supported unit for support.

18-20. Aviation Service Support Company, TOE 1-407

a. *Mission.* The normal mission of the aviation service support company is to provide administrative air transport service within the field army or the communications zone.

b. *Assignment.* This company is assigned to the field army, theater army support command, or other commands as required. Normally, it is attached to a headquarters and headquarters company, aviation battalion, TOE 1-256.

c. *Capabilities.* This unit can provide—

(1) Administrative air transport service for the theater army support command, major commands, and other commands as required.

(2) Air support for control, aerial radiological survey, observation, and reconnaissance in support of rear area protection operations.

(3) Necessary communications and air traffic control facilities to support VFR and IFR operations at the unit's base airfield.

(4) Local motor transport taxi service for general officers, senior commanders, and other personnel who use the aviation service.

d. *Organization.* The company consists of a company headquarters, flight operations platoon, fixed wing platoon, rotary wing platoon, and a maintenance platoon.

(1) *Company headquarters.* The company headquarters performs administrative and supply functions.

(2) *Flight operations platoon.* The flight operations platoon contains a platoon headquarters, a communication section, an airfield terminal control section, and an airfield service

section. Sufficient personnel are provided to establish and operate the airfield; to install, maintain, and operate the unit's communications and navigational equipment; and to provide terminal ground control approach services.

(3) *Fixed wing platoon.* The fixed wing platoon contains the personnel and airplanes to fulfill the fixed wing portion of the air transport service mission.

(4) *Rotary wing platoon.* The rotary wing platoon consists of a platoon headquarters, a utility helicopter section, and an observation helicopter section.

(5) *Maintenance platoon.* The maintenance platoon contains a platoon headquarters, a fixed wing maintenance section, and a rotary

wing maintenance section. It provides organizational maintenance for company aircraft.

e. Concept of Employment. The aviation service support company is normally attached to an aviation battalion (TOE 1-256), which is assigned to a transportation brigade or command. The unit may operate under direct control of the transportation brigade or command. It provides air transport service in support of major command headquarters. It provides a rapid means of transportation for command, control, liaison, and courier personnel of the theater army support command (TASCOM), the field army support command (FASCOM), and major subordinate command headquarters. Technical matters relating to support activities between this unit and its supporting or supported unit are resolved directly. Matters relating to policy and command relations are coordinated through appropriate channels.

APPENDIX A

REFERENCES

A-1. Army Regulations (AR)

★71-7	Military Training Aids and Army Training Aid Center System.
95-Series	Army Aviation.
★310-1	Military Publications—General Policies.
310-25	Dictionary of United States Army Terms.
310-50	Authorized Abbreviations and Brevity Codes.
350-1	Army Training.
★380-5	Safeguarding Defense Information.
385-40	Accident Reporting and Records.
750-Series	Maintenance of Army Equipment.

A-2. Field Manuals (FM)

1-40	Attack Helicopter Gunnery.
1-60	Army Air Traffic Operations.
1-100	Army Aviation Utilization.
1-105	Army Aviation Techniques and Procedures.
3-Series	Chemical, Biological, and Radiological Operations.
6-102	Field Artillery Battalion, Aerial Field Artillery.
★17-36	Divisional Armored and Air Cavalry Units.
★17-37	Air Cavalry Squadron.
19-1	Military Police Support, Army Divisions and Separate Brigades.
21-40	Chemical, Biological, Radiological and Nuclear Defense.
★21-60	Visual Signals.
24-1	Tactical Communications Doctrine.
29-22	Maintenance Battalion and Company Operations (Nondivisional).
29-30	Maintenance Battalion and Company Operations in Divisions and Separate Brigades.
30-5	Combat Intelligence.
30-20	Aerial Surveillance—Reconnaissance, Field Army.
31-20	Special Forces Operational Techniques.
31-21	Special Forces Operations—U.S. Army Doctrine.
31-23	Stability Operations—U.S. Army Doctrine.
31-36 (test)	Night Operations.
(C) 32-5	Signal Security (U).
(C) 32-20	Electronic Warfare (Groundbased) (U).
33-1	Psychological Operations—U.S. Army Doctrine.
33-5	Psychological Operations—Techniques and Procedures.
41-10	Civil Affairs Operations.
44-1	U.S. Army Air Defense Artillery Employment.
54-2	The Division Support Command and Separate Brigade Support Battalion.
55-46	Army Air Transport Operations.
57-35	Airmobile Operations.
57-38	Pathfinder Operations.
61-24	Division Communications.
61-100	The Division.
★100-10	Combat Service Support.
100-20	Field Service Regulations, Internal Defense and Development.
100-27	U.S. Army/U.S. Air Force Doctrine for Tactical Airlift Operations.
101-5	Staff Officers' Field Manual: Staff Organization and Procedure.



7

7



7



APPENDIX B

SUGGESTED OUTLINE FOR AN SOP

CLASSIFICATION

Headquarters
Location
Date

STANDING OPERATING PROCEDURES

I. GENERAL

- A. Purpose
A statement of the general coverage and uses of the SOP.
- B. Conformity.
Instructions as to the requirement for conformity in the procedures of subordinate and supporting units.
- C. Organization.
When applicable, designations of habitual task organizations.
- D. Combat Orders, Reports, and Distribution.
General Information common to all combat orders and reports which is applicable to all units of the publishing headquarters.

II. COORDINATION OF TACTICAL OPERATIONS

Detailed procedures are covered in appropriate SOP annexes. This paragraph in the body of the SOP contains information of general applicability, together with references to the appropriate annexes.

- A. Command and Control.
 - 1. Command Post.
 - a. Reporting Procedures.
 - b. Headquarters—include composition, movement, control and succession of command.
 - 2. Liaison and Coordination.
 - 3. Signal Communications—include reestablishment of signal facilities under nuclear attack.
- B. Intelligence.
 - 1. Prisoners of War.
 - 2. Communications and Electronic Intelligence.
 - 3. Map Instructions—covering availability, requisition, and distribution.
 - 4. Weather—include sources of information and distribution.
 - 5. Air Reconnaissance—include instruction on availability and requests.
 - 6. Counterreconnaissance.
 - 7. Attached and Supporting Intelligence Specialists.

- C. Coordinating Agencies—include all organizations for coordination tactical operations other than fire support.
- D. Procedures.
 - 1. Fire Support Coordination.
 - a. Procedures and Means of Coordination.
 - b. Coordination Measures.
 - c. Air Defense.
 - 2. Regulation and Coordination of Use of the Airspace Over the Combat Zone.
 - 3. Regulation and Coordination—of the use of that portion of the electro magnetic spectrum of primary interest to the tactical commander.
 - 4. Coordination—of tactical operations with administrative procedures.
- E. Techniques.
Operations Orders, Reports, and Distribution.
- F. Special Considerations.
 - 1. Actions to Minimize Effects of Nuclear Attack.
 - 2. Tactical Cover and Deception.
 - 3. Army Aviation—List items from policies of higher headquarters on operation, use, and control.
 - 4. Night Operations.
 - 5. Combat Surveillance.
 - 6. Mobility—include movement by motor, rail, water, and air.
 - 7. Psychological Operations—include support thereof.
 - 8. Special Operations.
 - 9. Rear Area Security—include counterguerrilla action.
 - 10. Signal Security.
 - 11. Pathfinder Operations.
 - 12. Internal Defense Operations.
 - 13. Police Operations.

III. COORDINATION OF COMBAT SERVICE SUPPORT OPERATIONS

Only key operational procedures of general applicability are covered in the body of the SOP. Most of the subheadings below will refer to an annex for detailed coverage.

- A. Coordinating Agencies. All organic or special organizations to coordinate combat service support.
- B. Procedures. Control and Coordination of administrative procedures with tactical operations.
- C. Techniques.
Administrative Orders, Reports and Distribution.
Orders and reports pertaining to administrative support units.
- D. Detailed Considerations.
 - 1. Logistics.
 - a. Coordination of Logistics Activities Within Each Administration Agency.
 - b. Materiel and Services.
 - (1) Supply. Class I, II and IV; III and IIIA; V; and Water (may be included as annexes).
 - (2) Services (Including Maintenance).

2. Medical Evacuation and Hospitalization.
3. Personnel.
 - a. Maintenance of Unit Strength.
 - (1) Strength, Records, and Reports. An effective unit disaster, casualty, and personnel status reporting procedure should be included.
 - (2) Replacements.
 - b. Personnel Management.
 - (1) Personnel Procedures. Personnel policies and activities used to implement the personnel management program.
 - (2) Prisoners of War and Civilian Internees. All normal phases of processing, handling, accounting and evacuation other than interrogation will be covered.
 - c. Development and Maintenance of Morale.
 - (1) Morale and Personnel Services. This includes authorized absences (pass, R&R, leave), decorations and awards, mail, PX supplies, finance, chaplain, and special services.
 - (2) Graves Registration Service. Policy on recovery and disposition of dead—friendly or enemy.
 - d. Maintenance of Discipline, Law and Order. Troop conduct and appearance, handling of stragglers and other disciplinary cases.
 - e. Headquarters Management. Applicable only to the CP of the publishing headquarters.
 - f. Miscellaneous. Matters not covered in above.
4. Area Damage Control. All possible disasters should be considered. Coordination must be made with rear area security plans.
5. Public Information and Community Relations. Policies made to improve military-civilian relations.

Commanding

(SOP)

Annexes: (To be included as appropriate when material is voluminous or is used by relatively few members of the command. At lower units, two or more annexes may be combined.)

- A—International Operations and Movement of the Headquarters
- B—Prisoners of War, Captured Documents and Materiel
- C—Air and Ground Reconnaissance
- D—Counterintelligence
- E—Fire Support Coordination
- F—Actions to Minimize Effects of Nuclear, Chemical, and Biological Attacks
- G—Army Aviation
- H—Movements
- I—Unconventional Warfare

J—Psychological Operations
K—Rear Area Security
L—Chemical Operations
M—Engineer
N—Medical
O—Aircraft Maintenance and Supply
P—Evasion and Escape
Q—Downed Aircraft Procedures, Search and Rescue
R—Aircraft Accident Investigation Plan
S—Crash Rescue Plan
T—Task Force Commander's Checklist
U—Civil Affairs Activities (FM 41-10)
V—Air Defense
W—Electronic Warfare
X—Military Police

APPENDIX C

AIR STANDARDIZATION AGREEMENT (AIR STD 44/25A)

PERSONNEL PROCEDURES FOR HELICOPTERS IN THE TACTICAL TRANSPORT ROLE

1. *Definitions.* (For the purpose of this standard.)
 - (a) *Chalk Number.* The number given to a complete aircraft load.
 - (b) *Chalk Troops.* The aircraft load of troops defined by a particular chalk number.
 - (c) *Chalk Commander.* The Commander of all troops embarked under one chalk number.
 - (d) *Crewman.* A member of the helicopter crew who travels in the cargo/passenger compartment in certain helicopters. His duties include taking charge of the chalk troops from emplaning to deplaning.
 - (e) *Ready Position.* A designated place where the chalk troops wait to emplane. It is desirable that on shore this is opposite the main loading door(s)/ramps at approximately 100 feet from the helicopter.

Type of Aircraft

2. These procedures are designed to be used with all types of transport helicopters engaged in tactical operations.
3. The procedures do not apply to light reconnaissance helicopters. When these helicopters are used the troops transported must be specially briefed.

Preparation of Helicopter

4. If the operation requires, a suitable deplaning rope or other lowering device will be fitted. For lowering stores a light line longer than the deplaning rope, with a hook attached for the rapid attachment and detachment of loads, will be fitted. Preferably the light line should have a friction device.
5. It is desirable to provide intercom at the chalk commander's position.
6. *Planning and Preparation.* To facilitate the planning and preparation of helicopter operations, standard operating procedures jointly approved by senior commanders are to be developed for both normal and short time reaction operations. For specific operations the air and ground forces are to exchange information which must include the following:
 - (a) (1) Requirement of lift including time and total number of personnel.
 - (2) Point of departure.
 - (3) Distance and destination.
 - (4) Requirement for backloading.
 - (5) Operational data such as map references, control of loading area, communications, and alternate scheduling.
 - (6) Intelligence data—enemy opposition, etc.

- (b) (1) Acceptance of assignment.
- (2) Allotment of helicopters by type and payload for aircraft.
- (3) Time schedule of helicopters available at loading point.
- (4) Flight schedule.
- (5) Requirements at destination for support personnel, etc. Request for air/helicopter escort, ground fire suppression support, etc.

7. *Action by Supported Unit*

- (a) Allocate chalk numbers to troops.
- (b) Brief troops on the following points (assisted where necessary by the helicopter unit)
 - (1) The emplaning location of the helicopters for each chalk number.
 - (2) The dangers of main and tail rotors and the engine exhausts.
 - (3) The necessity for weapons to be on safe and without a round in the chamber, and for them to be carried so as to avoid damage to the helicopter.
 - (4) The removal or folding of radio antennae in order to avoid damage to the rotor blades.
 - (5) Safety and emergency procedures.
- (c) Station the troops in the ready position at the designated time.
- (d) Ensure that the helicopter unit commander is briefed on the supported units mission.

Preparatory Action

- 8. The supported unit commander must ensure that:
 - (a) Chalk numbers are allocated to his troops.
 - (b) Troops are briefed on the emplaning location of the helicopters for each chalk number, and are in the ready position at the designated time.
 - (c) The helicopter unit commander is briefed on the supported unit's mission.

Emplanement

- 9. The responsibilities of the chalk commander, on receipt of the signal to emplane (see Enclosure 1), are:
 - (a) To lead his troops to the helicopter.
 - (b) To station himself near to the door or ramp and assists his troops to emplane.
 - (c) To direct his troops to the correct position in the helicopter, and emplane last of all.
 - (d) To ensure that safety harnesses/belts are secured and then to notify the crewman or pilot.

In-Flight Procedure

- 10. It is the responsibility of the crewman or in his absence the chalk commander to ensure that communication is established with the pilot if intercom is fitted.
- 11. On approaching the landing point, the chalk commander should be

informed of the helicopters heading on touchdown and any other pertinent information.

Deplanement

12. (a) On approaching the landing point the pilot is to signal "stand-by" (see Enclosure 1).
 - (b) On receipt of the deplane signal (see Enclosure 1) the troops are to release harnesses/belts and follow the chalk commander out of the helicopter.
 - (c) The chalk commander is to give the "troops clear" signal to the pilot or the crewman (see Enclosure 1).
 - (d) When deplaning, especially on a slope the chalk commander must ensure that his troops keep clear of the rotor blades.
13. In carrier deck operations the deplaning troops will immediately be led off in a safe direction by the Flight Deck Guide.

Deplaning from the Hover

14. It may sometimes be necessary for troops to deplane by jumping out from a low hover, or by using ropes, ladders, or other devices from greater heights. In such cases troops must be specially briefed, trained and equipped.

Night Procedures

15. Procedures for night operations are basically the same as those for day. The night signals are shown in Enclosure 1.

ENCLOSURE 1 TO
ASCC AIR STD 44/25A

TABLE OF SIGNALS

ACTION	DAY	NIGHT
EMPLANE	"Thumbs up" by pilot or crewman	One long flash of flashlight or emplaning light
READY TO TAKE-OFF	Intercom, or tap pilot	Same as day
STANDBY	Intercom, and/or 2 short bell rings or red light "ON".	Same as day
DEPLANE	Intercom, and/or 1 long or green light "ON".	Same as day
TROOPS CLEAR	"Thumbs up" by Chalk Commander	Two flashes of flashlight by chalk commander
EMERGENCY	Intercom, and/or 3 bell rings, or flashing red light	Same as day



1

2



3

4



APPENDIX D

BATTALION OPERATIONS CENTER

D-1. Mission

The mission of the battalion operations center (BOC), suggested type organization, is to receive and coordinate all tactical missions from higher headquarters and disseminate them to the subordinate organic and attached units for mission accomplishment.

D-2. Organization

The BOC is normally composed of the following:

- a. Officer in charge.
- b. Duty officers (rated).
- c. Operations coordinator.

D-3. Duties of Personnel

a. *Officer in Charge.* The officer in charge of the BOC is responsible for the smooth and continuous functioning of the center. He supervises the daily mission scheduling and insures that available aviation assets are employed effectively to fulfill the mission requirements. He maintains liaison with higher headquarters to insure timely availability of aviation assets in support of preplanned operations. He supervises the preparation of all outgoing reports to higher headquarters concerning aircraft availability and commitments. During tactical operations he normally maintains a detailed situation map so that the duty officers are kept up to date on the progress of the operation with respect to aircraft requirements.

b. *Duty Officers.* The number of duty officers required to operate the BOC will normally be dependent upon the nature of the battalion mission. A duty officer is a rated aviator with a knowledge of the functions of the battalion. He is directly responsible to the BOC officer in charge. His duties may include the following:

- (1) Maintaining liaison with higher headquarters with respect to aircraft availability.
- (2) Maintaining appropriate records and daily aircraft status reports.

(3) Consolidating mission requests from higher headquarters.

(4) Recording and assigning all missions to the individual company operations.

(5) Monitoring the progress of all assigned missions.

(6) Acting as a flight-following coordinator for battalion aircraft fulfilling mission requirements.

(7) Initiating search and rescue on downed or missing aircraft.

(8) Preparing and forwarding necessary aircraft status reports to higher headquarters.

(9) Maintaining close liaison with assigned/attached operations personnel.

c. *Operations Coordinator.* The operations coordinator works for both the officer in charge and duty officers on matters pertaining to reports, filing, coordination, and liaison. His duties may include—

(1) Preparation of all required administrative reports to higher headquarters.

(2) Maintenance of unclassified files.

(3) Maintenance of flight records of all rated officers and warrant officers assigned to the headquarters company.

(4) Maintenance of and accounting for all receipted equipment in the section.

(5) Assisting the duty officers in other section functions.

D-4. Employment

The BOC is the focal point for all operational matters pertaining to aviation requirements within the battalion. It is the portion of the S3 complex that provides coordination between higher headquarters and organic or attached unit operations with respect to mission assignments. The BOC is responsible for scheduling all aviation assets of the battalion in support of aviation requirements from higher headquarters. It insures timely execution of missions by maintaining close liaison with the individual elements responsible. The section is employed so that assets of the battalion may be

readily transferred from one mission to another in order to accomplish a more demanding requirement. In order to do this, a detailed aircraft availability and crew status must be kept readily available for immediate reference. When the battalion is in support of a unit on an independent mission, without the support of a higher aviation headquarters, the BOC section may be required to act

as a flight-following agency. In this case, SOP of the individual battalion involved will dictate the detailed method of operation. Around-the-clock employment of the BOC section insures that the aviation assets of the combat aviation battalion are employed in a manner which lends continuity to mission accomplishment and immediate responsiveness to requirements for recalls.

INDEX

	Paragraph	Page
Airspace control element (ACE)	1-2c, 4-3f, 4-13, 4-22f(1), 7-5a, 7-15b, 8-3a(2), 8-9, 10-5c	1-1, 4-2, 4-4, 4-7, 7-1, 7-5, 8-1, 8-3, 10-2
Adjutant (S1)	4-11, 8-7, 13-5c, 14-5b(2)	4-3, 8-2, 13-1, 14-2
Aerial field artillery	10-5a	10-1
Air cavalry	10-5a	10-1
Assistant division aviation officer	4-6, 7-6b	4-2, 7-2
Attack helicopters	10-7	10-4
Air traffic control (ATC)	1-2c, 3-4e, 4-3e, 4-22f(2), 7-15, 8-8, 8-10, 13-5c(3)	1-1, 3-1, 4-2, 4-7, 7-5, 8-2, 8-8, 13-2
Aviation safety officer	4-16e	4-4
Battalion staff	4-8	4-2
CBR officer	4-16f, 15-6c(9)	4-5, 15-3
Civil-military operations officer (S5)	4-13, 13-5	4-4, 13-1
Command post	2-6, 4-10, 4-18, 6-4, 8-5c, 10-6b	2-2, 4-3, 4-5, 6-1, 8-1, 10-3
Command relationship	2-2, 4-7	2-1, 4-2
COMMEL officer	4-16c, 10-6c, 13-5c(5), 14-5b(6)	4-4, 10-4, 13-2, 14-3
Division aviation officer	4-5, 4-6, 7-6a	4-2, 7-2
Executive officer	4-8, 4-10, 14-5a	4-2, 4-3, 4-4
Group commander	7-7, 14-4	7-2, 14-1
Intelligence officer (S2)	4-12, 4-18b, 8-6, 9-7, 13-5, 14-5b(5)	4-3, 4-5, 8-1, 9-3, 13-1, 14-3
Liaison	4-16g, 7-9	4-5, 7-3
Logistics officer (S4)	4-14, 8-7, 13-5c	4-4, 8-2, 13-1
Maintenance officer	4-16d, 10-6c(5)	4-4, 10-4
Night operations	2-8	2-2
Operations and training officer (S3)	4-13, 4-18b, 4-21e & g, 8-6, 8-8, 8-10, 9-4, 9-5, 13-5b	4-4, 4-5, 4-6, 8-2, 8-3, 9-1, 13-1
Pathfinders	4-2, 8-8	4-1, 8-2
Safety officer	2-9, 4-16e	2-2, 4-4
Sergeant major	4-15	4-4
Surgeon	4-16b, 10-6c(4), 13-5c(6)	4-4, 10-4, 13-2
TOE organizations:		
Airborne division:		
Combat aviation battalion (TOE 1-55)	3-1	3-1
Headquarters and headquarters company (TOE 1-56)	4-1	4-1
Assault helicopter company (TOE 1-57)	5-1	5-1
Aviation general support company (TOE 1-58)	6-1	6-1
Airmobile division:		
Combat aviation group (TOE 1-100T)	7-1	7-1
Headquarters and headquarters company (TOE 1-101T)	8-1	8-1
Aviation general support company (TOE 1-102T)	9-1	9-1
Assault helicopter battalion (TOE 1-155T)	10-1	10-1
Headquarters and headquarters company (TOE 1-156T)	10-6	10-3
Attack helicopter company (TOE 1-157T)	10-7	10-4
Assault helicopter company (TOE 1-158T)	10-8	10-5
Assault support helicopter battalion (TOE 1-165T)	11-1	11-1
Headquarters and headquarters company (TOE 1-166T)	11-6	11-2
Assault support helicopter (TOE 1-167T)	11-7	11-2
Infantry division:		
Combat aviation battalion (TOE 1-75)	3-1	3-1

TOE organization—Continued

Infantry division—Continued

Combat aviation battalion (TOE 1-75)

	Paragraph	Page
Headquarters and headquarters company (TOE 1-76) -----	4-1	4-1
Assault helicopter company (TOE 1-77) -----	5-1	5-1
Aviation general support company (TOE 1-78) -----	6-1	6-1
Nondivisional:		
HHC, aviation brigade (TOE 1-66) -----	15-1	15-1
HHC, combat aviation group (TOE 1-252) -----	14-1	14-1
HHC, combat aviation battalion (TOE 1-256) -----	13-1	13-1

By Order of the Secretary of the Army:

Official:

KENNETH G. WICKHAM,
Major General, United States Army,
The Adjutant General.

W. C. WESTMORELAND,
General, United States Army,
Chief of Staff.

Distribution:

To be distributed in accordance with DA Form 12-11 requirements for Army Aviation-Organization and Employment and Aviation Battalion.



.

.



.

.



S/K

Page

S/K

*FM 1-15
copy 2*

S/S ch 1

FM 1-15

DEPARTMENT OF THE ARMY FIELD MANUAL

**AVIATION BATTALION,
GROUP, AND
BRIGADE**

RETURN TO ARMY LIBRARY
ROOM 1 A 518 PENTAGON



**HEADQUARTERS, DEPARTMENT OF THE ARMY
DECEMBER 1969**



1

2



3

4



FIELD MANUAL

No. 1-15

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 18 December 1969

AVIATION BATTALION, GROUP, AND BRIGADE

	Paragraph	Page
PART ONE. INTRODUCTION		
CHAPTER 1. PURPOSE AND SCOPE	1-1-1-3	1-1
2. GENERAL	2-1-1-12	2-1-2-3
PART TWO. COMBAT AVIATION BATTALION, AIRBORNE AND INFANTRY DIVISIONS		
CHAPTER 3. GENERAL	3-1-3-5	3-1
4. HHC, COMBAT AVIATION BATTALION		
Section I. Mission and Composition	4-1-4-3	3-1
II. Command and Staff	4-4-4-22	4-2-4-6
CHAPTER 5. ASSAULT HELICOPTER COMPANY	5-1-5-4	5-1, 5-2
6. AVIATION GENERAL SUPPORT COMPANY	6-1-6-4	6-1
PART THREE. COMBAT AVIATION GROUP, AIRMOBILE DIVISION		
CHAPTER 7. INTRODUCTION	7-1-7-15	7-1-7-5
8. HHC, COMBAT AVIATION GROUP	8-1-8-10	8-1-8-3
9. AVIATION GENERAL SUPPORT COMPANY	9-1-9-10	9-1-9-3
10. ASSAULT HELICOPTER BATTALION	10-1-10-8	10-1-10-5
11. ASSAULT SUPPORT HELICOPTER BATTALION	11-1-11-7	11-1, 11-2
PART FOUR. COMBAT AVIATION BATTALION, GROUP, AND BRIGADE (NONDIVISIONAL)		
CHAPTER 12. GENERAL		
Section I. Introduction	12-1-12-3	12-1
II. The Battalion	12-4-12-8	12-2
III. The Group	12-9-12-12	12-2, 12-3
IV. The Brigade	12-13-12-16	12-3
CHAPTER 13. HHC, COMBAT AVIATION BATTALION (NONDIVISIONAL)	13-1-13-5	13-1
14. HHC, COMBAT AVIATION GROUP (NONDIVISIONAL)	14-1-14-5	14-1
15. HHC, AVIATION BRIGADE (NONDIVISIONAL)	15-1-15-6	15-1, 15-2
APPENDIX A. REFERENCES		A-1
B. SUGGESTED OUTLINE FOR AN SOP		B-1
C. AIR STANDARDIZATION AGREEMENT (AIR STD 44/25A)		C-1
D. BATTALION OPERATIONS CENTER		D-1

INDEX	Index-1
-------	---------

*This manual supersedes FM 1-15, 21 April 1967, and FM 1-20 (TEST), 5 April 1968.



PART ONE

INTRODUCTION

CHAPTER 1

PURPOSE AND SCOPE

1-1. Purpose

This manual provides doctrine and guidance for commanders, staff officers, and other personnel concerned with the operation of the Army aviation battalion, group, and brigade. It is intended for use as a reference, and as a text for the presentation of instruction on the organization and functions of these Army aviation units.

1-2. Scope

a. Doctrine contained in this manual covers the operation of units which provide Army aviation combat support to land forces. The combat service support functions of Army aviation units are discussed in FM 55-46.

b. Applicable TOE are referenced throughout the manual to assist users requiring more detailed information on the organization and equipment of specific units.

c. The manual discusses the relationship of Army aviation to the airspace control element (ACE) (FM 101-5) and air traffic control (ATC) elements (FM 1-60) in the combat aviation battalion, group, and brigade.

d. Subject to modification to meet the requirements of operational environments and the intensity of conflict, the operations described in this manual are capable of worldwide application.

e. The material in this manual is applicable to cold war, limited war, and general war situations to include both nuclear and nonnuclear war.

f. This manual is in consonance with the following international standardization agreements which are identified by type of agreement and number at the beginning of each appropriate chapter in the manual.

(1) STANAG 3468, General Rules Covering the Transport of Loads by Helicopter.

(2) STANAG 3531, Investigation of Aircraft/Missile Accidents/Incidents.

1-3. Recommendations To Improve Clarity or Accuracy

Users of this manual are encouraged to submit recommended changes and comments to improve the manual. Comments should be keyed to the specific page, paragraph, and line of text in which the change is recommended. Reasons will be provided for each comment to insure understanding and complete evaluation. Comments should be prepared using DA Form 2028 (Recommended Changes to Publication) and forwarded direct to the Commanding Officer, United States Army Combat Developments Command Aviation Agency, Fort Rucker, Alabama 36360. Originators of proposed changes which would constitute a significant modification of approved Army doctrine may send an information copy, through command channels, to the Commanding General, United States Army Combat Developments Command, Fort Belvoir, Virginia 22060, to facilitate review and followup.



APPENDIX A

REFERENCES

A-1. Army Regulations (AR)

95-Series	Army Aviation.
220-58	Organization and Training for Chemical, Biological and Radiological Operations.
310-25	Dictionary of United States Army Terms.
310-50	Authorized Abbreviations and Brevity Codes.
350-1	Army Training.
385-40	Accident Reporting and Records.
750-Series	Maintenance of Army Equipment.

A-2. Field Manuals (FM)

1-5	Aviation Company.
1-40	Attack Helicopter Gunnery.
1-60	Army Air Traffic Operations.
1-100	Army Aviation Utilization.
1-105	Army Aviation Techniques and Procedures.
1-110	Attack Helicopter Employment.
3-Series	Chemical, Biological, and Radiological Operations.
6-102	Field Artillery Battalion, Aerial Artillery
19-1	Military Police Support, Army Divisions and Separate Brigades.
21-40	Chemical, Biological, Radiological and Nuclear Defense.
24-1	Tactical Communications Doctrine.
29-22	Maintenance Battalion and Company Operations (Nondivisional).
29-30	Maintenance Battalion and Company Operations in Divisions and Separate Brigades.
30-5	Combat Intelligence.
30-20	Aerial Surveillance-Reconnaissance, Field Army.
31-20	Special Forces Operational Techniques.
31-21	Special Forces Operations-US Army Doctrine.
31-23	Stability Operations-US Army Doctrine.
31-36(TEST)	Night Operations.

0001140506

(C) 32-5	Signal Security (U).
(C) 32-20	Electronic Warfare (Groundbased) (U).
33-1	Psychological Operations-U.S. Army Doctrine.
33-5	Psychological Operations-Techniques and Procedures.
41-10	Civil Affairs Operations.
44-1	US Army Air Defense Artillery Employment.
44-3	Air Defense Artillery Employment, CHAPARRAL/VULCAN.
54-2	The Division Support Command and Separate Brigade Support Battalion.
55-46	Army Air Transport Operations.
57-35	Airmobile Operations.
57-38	Pathfinder Operations.
61-24	Division Communications.
61-100	The Division.
100-20	Field Service Regulations, Internal Defense and Development.
100-27	U.S. Army/U.S. Air Force Doctrine for Tactical Airlift Operations.
101-5	Staff Officers' Field Manual: Staff Organization and Procedure.

PENTAGON LIBRARY



0001140506